THE HEMIPTERIST

A JOURNAL ON THE NATURAL HISTORY OF THE HEMIPTERA OF THE BRITISH ISLES



Volume 3 (2016)

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Contributions to this journal are welcome from anyone wishing to write on the natural history of the Hemiptera of the British Isles. Articles should be sent in Microsoft Word® format to the above email address, in the style adopted by the journal. All submissions are reviewed by the editor, and a proof of the work in portable document format (PDF) is supplied prior to publication.

This document was first published on the internet at https://sites.google.com/site/thehemipterist in two parts, and is here published again in print as a complete volume.

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ISSN 2514-0396 (Print) ISSN 2514-0388 (Online)

Cover photograph: Alloeotomus gothicus (Fallén) (Hemiptera: Miridae).

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AN ADDENDUM TO BUTLER'S BIOLOGY OF THE BRITISH HEMIPTERA-HETEROPTERA

R. P. RYAN

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There have been many changes to the nomenclature of the British Hemiptera-Heteroptera in the nine decades since Butler (1923). These, together with the absence of a species index, make this text awkward to use by modern Hemiptersts. To alleviate the problem, I present below a checklist of the modern names of the British Hemiptera-Heteroptera with the corresponding number and name used as headings for Butler's species accounts. The name correspondences were derived from Ryan (2014), Brooke (2006) and Kloet & Hincks (1964). Multiple correspondences due to ambiguous species names are not shown here, but are documented in Ryan (2015 & 2016).

ARADIDAE

TO BE THE		
Aneurus avenius (Dufour)	161a.	Aneurus avenius Duf.
Aneurus laevis (Fabricius)	161.	Aneurus laevis Fabr.
Aradus aterrimus Fieber	160.	Aradus aterrimus D. & S
Aradus betulae (Linnaeus)	160a.	Aradus betulae Lin.
Aradus cinnamomeus Panzer	-	-
Aradus corticalis (Linnaeus)	158.	Aradus corticalis L.
Aradus depressus (Fabricius)	159.	Aradus depressus Fab.

ACANTHOSOMATIDAE

Acanthosoma haemorrhoidale (Linnaeus)	34.	Acanthosoma haemorrhoidale L.
Cyphostethus tristriatus (Fabricius)	38.	Cyphostethus tristriatus Fabr.
Elasmostethus interstinctus (Linnaeus)	35.	Acanthosoma interstinctum L.
Elasmucha ferrugata (Fabricius)	37.	Elasmostethus ferrugatus Fabr.
Elasmucha grisea (Linnaeus)	36.	Elasmostethus grisea L.

CYDNIDAE

DNIDAE		
Adomerus biguttatus (Linnaeus)	11.	Sehirus biguttatus L.
Byrsinus flavicornis (Fabricius)	7.	Cydnus flavicornis Fabr.
Canthophorus impressus (Horváth)	10.	Sehirus dubius Scop.
Geotomus punctulatus (A. Costa)	8.	Geotomus punctulatus Cost.
Legnotus limbosus (Geoffroy)	13.	Gnathoconus albomarginatus Goeze
Legnotus picipes (Fallén)	14.	Gnathoconus picipes Fall.
Sehirus luctuosus Mulsant & Rey	12.	Sehirus luctuosus M. & R.
Tritomegas bicolor (Linnaeus)	9.	Sehirus bicolor L.
Tritomegas sexmaculatus (Rambur)	-	-

Thyreocoridae

Th	vrancarie	scarabaeoides	(I innague) 6
III	yreocoris	scarabaeoiaes	(Lilliaeus) 0.

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5.	Thuren	COPIC C	carabae	oides I
0.	Inyico	$\omega u \omega \omega$	carabace	mucs L.

SCUTELLERIDAE

UTELLEKIDAL		
Eurygaster austriaca (Schrank)	4.	Eurygaster nigrocucullata Goeze
Eurygaster maura (Linnaeus)	3.	Eurygaster maura L.
Eurygaster testudinaria (Geoffroy)	-	-
Odontoscelis fuliginosa (Linnaeus)	1.	Odontoscelis fuliginosa L.
Odontoscelis lineola Rambur	2.	Odontoscelis dorsalis Fabr.

PENTATOMIDAE

Aelia acuminata (Linnaeus)	16.	Aelia acuminata L.
Carpocoris mediterraneus Tamanini	-	-
Carpocoris purpureipennis (De Geer)	21.	Carpocoris fuscispina Boh.
Chlorochroa juniperina (Linnaeus)	24.	Chlorochroa juniperina L.
Dolycoris baccarum (Linnaeus)	22.	Dolycoris baccarum L.

PENTATOMIDAE (CONTINUED)		
Dyroderes umbraculatus (Fabricius)	_	_
Eurydema dominulus (Scopoli)	27.	Eurydema dominulus Scop.
Eurydema oleracea (Linnaeus)	28.	Eurydema oleraceum L.
Eurydema ornata (Linnaeus)	_	-
Eysarcoris aeneus (Scopoli)	19.	Eusarcoris aeneus Scop.
Eysarcoris venustissimus (Schrank)	18.	Eusarcoris melanocephalus Fabr.
Jalla dumosa (Linnaeus)	32.	Jalla dumosa L.
Neottiglossa pusilla (Gmelin)	17.	Neottiglossa pusilla Gmel.
Nezara viridula (Linnaeus)	-	-
Palomena prasina (Linnaeus)	23.	Palomena prasina L.
Pentatoma rufipes (Linnaeus)	26.	Pentatoma rufipes L.
Peribalus strictus (Fabricius)	20.	Peribalus vernalis Wolff
Picromerus bidens (Linnaeus)	29.	Picromerus bidens L.
Piezodorus lituratus (Fabricius)	25.	Piezodorus lituratus Fabr.
Podops inunctus (Fabricius)	5.	Podops inuncta Fabr.
Rhacognathus punctatus (Linnaeus)	30.	Rhacognathus punctatus L.
Rhaphigaster nebulosa (Poda)	-	-
Sciocoris cursitans (Fabricius)	15.	Sciocoris cursitans Fabr.
Troilus luridus (Fabricius)	31.	Troilus luridus Fabr.
Zicrona caerulea (Linnaeus)	33.	Zicrona caerulea L.
COREIDAE		D 1 11 CH "C1"
Arenocoris fallenii (Schilling)	44.	Pseudophloeus fallenii Schill.
Arenocoris waltlii (Herrich-Schaeffer)	45.	Pseudophloeus waltlii H. S.
Bathysolen nubilus (Fallén)	46.	Bathysolen nubilus Fall.
Ceraleptus lividus Stein	47.	Ceraleptus lividus Stein
Coreus marginatus (Linnaeus)	41.	Syromastes marginatus L.
Coriomeris denticulatus (Scopoli)	48.	Coreus denticulatus Scop.
Enoplops scapha (Fabricius)	40.	Enoplops scapha Fab.
Gonocerus acuteangulatus (Goeze)	43.	Gonocerus acuteangulatus Goeze
Leptoglossus occidentalis Heidemann	-	-
Spathocera dalmanii (Schilling)	39.	Spathocera dalmani Schill.
Syromastus rhombeus (Linnaeus)	42.	Verlusia quadrata Fab.
ALYDIDAE		
Alydus calcaratus (Linnaeus)	49.	Alydus calcaratus L.
RHOPALIDAE		
Brachycarenus tigrinus (Schilling)	_	_
Chorosoma schillingii (Schilling)	60.	Chorosoma schillingi Schml.
Corizus hyoscyami (Linnaeus)	53.	Therapha hyoscyami L.
Liorhyssus hyalinus (Fabricius)	58.	Corizus hyalinus Fabr.
Myrmus miriformis (Fallén)	59.	Myrmus miriformis Fall.
Rhopalus maculatus (Fieber)	55.	Corizus maculatus Fieb.
Rhopalus parumpunctatus Schilling	57.	Corizus parumpunctatus Schill.
Rhopalus rufus Schilling	57a.	Corizus rufus Schill.
Rhopalus subrufus (Gmelin)	56.	Corizus subrufus Gmel.
Stictopleurus abutilon (Rossi)	54.	Corizus crassicornis var. abutilon Rossi
Stictopleurus punctatonervosus (Goeze)	54.	Corizus crassicornis L.
• •		
PYRRHOCORIDAE	40-	
Pyrrhocoris apterus (Linnaeus)	135.	Pyrrhocoris apterus L.
STENOCEPHALIDAE		
Dicranocephalus agilis (Scopoli)	50.	Stenocephalus agilis Scop.
Dicranocephalus albipes (Fabricius)	52.	Stenocephalus albipes Fab.
Dicranocephalus medius (Mulsant & Rey)	51.	Stenocephalus medius M. & R.

S.

Lygaeidae		
Acompus pallipes (Herrich-Schaeffer)	-	-
Acompus rufipes (Wolff)	96.	Acompus rufipes Wolff
Aphanus rolandri (Linnaeus)	108.	Calyptonotus rolandri L.
Arocatus longiceps Stål	-	-
Beosus maritimus (Scopoli)	113.	Beosus maritimus Scop.
Chilacis typhae (Perris)	81.	Chilacis typhae Perr.
Cymus aurescens Distant	73.	Cymus obliquus Horv.
Cymus claviculus (Fallén)	75.	Cymus claviculus Fall.
Cymus glandicolor Hahn	72.	Cymus glandicolor Hahn
Cymus melanocephalus Fieber	74.	Cymus melanocephalus Fieb.
Drymus brunneus (R.F. Sahlberg)	122.	Drymus brunneus Sahlb.
Drymus latus Douglas & Scott	119.	Drymus latus D. & S.
Drymus pilicornis (Mulsant & Rey)	120.	Drymus pilicornis M. & R.
Drymus pilipes Fieber	118.	Drymus pilipes Fieb.
Drymus pumilio Puton	-	-
Drymus ryeii Douglas & Scott	121.	Drymus sylvaticus Fab. var. ryei D. & S
Drymus sylvaticus (Fabricius)	121.	Drymus sylvaticus Fab.
Emblethis denticollis Horváth	-	-
Emblethis griseus (Wolff)	114.	Emblethis verbasci Fabr.
Eremocoris abietis (Linnaeus)	-	-
Eremocoris fenestratus (Herrich-Schaeffer)	117.	Eremocoris fenestratus H. S.
Eremocoris plebejus (Fallén)	115.	Eremocoris plebeius Fall.
Eremocoris podagricus (Fabricius)	116.	Eremocoris podagricus Fabr.
Gastrodes abietum Bergroth	133.	Gastrodes abietis L.
Gastrodes grossipes (De Geer)	134.	Gastrodes ferrugineus L.
Graptopeltus lynceus (Fabricius)	109.	Aphanus lynceus Fabr.
Henestaris halophilus (Burmeister)	80.	Henestaris halophilus Burm.
Henestaris laticeps (Curtis)	79.	Henestaris laticeps Curt.
Heterogaster artemisiae Schilling	82.	Heterogaster artemisiae Schill.
Heterogaster urticae (Fabricius)	83.	Heterogaster urticae Fab.
Ischnocoris angustulus (Boheman)	91.	Ischnocoris angustulus Boh.
Ischnodemus quadratus Fieber	-	-
Ischnodemus sabuleti (Fallén)	78.	Ischnodemus sabuleti Fall.
Kleidocerys ericae (Horváth)	77.	Ischnorhynchus geminatus Fieb.
Kleidocerys resedae (Panzer)	76.	Ischnorhynchus resedae Pz.
Lamproplax picea (Flor)	123.	Drymus piceus Flor.
Lasiosomus enervis (Herrich-Schaeffer)	95.	Lasiosomus enervis H. S.
Lygaeus equestris (Linnaeus)	69.	Lygaeus equestris Lin.
Lygaeus simulans Deckert	-	-
Macrodema microptera (Curtis)	92.	Macrodema micropterum Curt.
Macroplax preyssleri (Fieber)	-	-
Megalonotus antennatus (Schilling)	86.	Rhyparochromus antennatus Schill.
Megalonotus chiragra (Fabricius)	89.	Rhyparochromus chiragra Fab.
Megalonotus dilatatus (Herrich-Schaeffer)	88.	Rhyparochromus dilatatus H. S.
Megalonotus emarginatus (Rey)	-	-
Megalonotus praetextatus (Herrich-Schaeffer)	87.	Rhyparochromus praetextatus H. S.
Megalonotus sabulicola (Thomson)	-	-
Metopoplax ditomoides (A. Costa)	-	-
Metopoplax fuscinervis Stål	-	-
Notochilus limbatus Fieber	124.	Notochilus limbatus Fieb.
Nysius cymoides (Spinola)	-	-
Nysius ericae (Schilling)	-	-
Nysius graminicola (Kolenati)	-	-
Nysius helveticus (Herrich-Schaeffer)	70.	Nysius lineatus Cost.
Nysius huttoni F.B. White	-	-
Nysius senecionis (Schilling)	_	-
Nysius thymi (Wolff)	71.	Nysius thymi Wolff
Orsillus depressus (Mulsant & Rey)	_	-
Ortholomus punctipennis (Herrich-Schaeffer)	-	-
• • • • • • • • • • • • • • • • • • • •		

LYGAEIDAE (CONTINUED)		
Pachybrachius fracticollis (Schilling)	84.	Pamera fracticollis Schill.
Pachybrachius luridus Hahn	85.	Pamera lurida Hahn
Peritrechus angusticollis (R.F. Sahlberg)	-	-
Peritrechus convivus (Stål)	104.	Trapezonotus distinguendus Flor
Peritrechus geniculatus (Hahn)	100.	Peritrechus geniculatus Hahn
Peritrechus gracilicornis Puton	101.	Peritrechus gracilicornis Put.
Peritrechus lundii (Gmelin)	103.	Peritrechus sylvestris Fabr.
Peritrechus nubilus (Fallén)	102.	Peritrechus nubilus Fall.
Pionosomus varius (Wolff)	93.	Pionosomus varius Wolff
Plinthisus brevipennis (Latreille)	94.	Plinthisus brevipennis Latr.
Pterotmetus staphyliniformis (Schilling)	-	-
Raglius alboacuminatus (Goeze)	111.	Aphanus alboacuminatus Goeze
Rhyparochromus pini (Linnaeus)	112.	Aphanus pini L.
Rhyparochromus vulgaris (Schilling)	-	-
Scolopostethus affinis (Schilling)	129.	Scolopostethus affinis Schill.
Scolopostethus decoratus (Hahn)	131.	Scolopostethus decoratus Hahn
Scolopostethus grandis Horváth	128.	Scolopostethus grandis Horv.
Scolopostethus pictus (Schilling)	127.	Scolopostethus pictus Schill.
Scolopostethus puberulus Horváth	132.	Scolopostethus puberulus Horv.
Scolopostethus thomsoni Reuter	130.	Scolopostethus thomsoni Reut.
Sphragisticus nebulosus (Fallén)	-	-
Stygnocoris fuligineus (Geoffroy)	99.	Stygnocoris fuligineus Geoffr.
Stygnocoris rusticus (Fallén)	97.	Stygnocoris rusticus Fall.
Stygnocoris sabulosus (Schilling)	97. 98.	Stygnocoris pedestris Fall.
Taphropeltus contractus (Herrich-Schaeffer)	125.	Notochilus contractus H. S.
	125.	Notochilus hamulatus Thom.
Taphropeltus hamulatus (Thomson)	105.	
Trapezonotus arenarius (Linnaeus)	105.	Trapezonotus arenarius L.
Trapezonotus desertus Seidenstücker	106.	Tuan at an atua dian an Stål
Trapezonotus dispar Stål	100.	Trapezonotus dispar Stål
Trapezonotus ullrichi (Fieber)	90.	Trapezonotus ullrichi Fieb.
Tropistethus holosericus (Scholtz)		Tropistethus holosericeus Scholtz
Xanthochilus quadratus (Fabricius)	110.	Aphanus quadratus Fabr.
BERYTIDAE		
Berytinus clavipes (Fabricius)	62.	Berytus clavipes Fab.
Berytinus crassipes (Herrich-Schaeffer)	66.	Berytus crassipes H. S.
Berytinus hirticornis (Brullé)	00.	Derytus crassipes 11. S.
Berytinus minor (Herrich-Schaeffer)	63.	Berytus minor H. S.
Berytinus minor (Heffieh-Schaeffer) Berytinus montivagus (Meyer-Dür)	65.	Berytus munor 11. S. Berytus montivagus Mey.
Berytinus signoreti (Fieber)	64.	Berytus signoreti Fieb.
Gampsocoris punctipes (Germar)	68.	Metacanthus elegans Curt.
Metatropis rufescens (Herrich-Schaeffer)	67.	Metatropis rufescens H. S.
Neides tipularius (Linnaeus)	61.	Neides tipularius L.
iveides uputartus (Linnacus)	01.	iveides tiputarius L.
PIESMATIDAE		
Parapiesma quadratum (Fieber)	136.	Piesma quadrata Fieb.
Piesma maculatum (Laporte)	137.	Piesma maculata Lap.
Tresma maemamm (Superio)	107.	1 tesmu mueutuu Zupi
TINGIDAE		
Acalypta brunnea (Germar)	140.	Acalypta brunnea Germ.
Acalypta carinata (Panzer)	141.	Acalypta cervina Germ.
Acalypta nigrina (Fallén)	142.	Acalypta nigrina Fall.
Acalypta parvula (Fallén)	144.	Acalypta parvula Fall.
Acalypta platycheila (Fieber)	141a.	Acalypta platychila Fieb.
Deleted (Bedwell, 1945):	143.	Acalypta macrophthalma Fieb.
Agramma laetum (Fallén)	138.	Serenthia laeta Fall.
Campylosteira verna (Fallén)	139.	Campylostira verna Fall.
Catoplatus fabricii (Stål)	153.	Monanthia fabricii Stål
Corythucha ciliata (Say)	_	_

Corythucha ciliata (Say)

TINGIDAE (CONTINUED)		
Derephysia foliacea (Fallén)	148.	Derephysia foliacea Fall.
Dictyla convergens (Herrich-Schaeffer)	157.	Monanthia humuli F.
Dictyonota fuliginosa A. Costa	147.	Dictyonota fuliginosa Costa
Dictyonota strichnocera Fieber	146.	Dictyonota strichnocera Fieb.
Kalama tricornis (Schrank)	145.	Dictyonota tricornis Schrk.
Lasiacantha capucina (Germar)		Lasiacantha capucina Germ.
Oncochila simplex (Herrich-Schaeffer)	156.	Monanthia simplex H. S.
Physatocheila confinis Horváth	-	-
Physatocheila dumetorum (Herrich-Schaeffer)	155.	Monanthia dumetorum H. S.
Physatocheila harwoodi China	-	-
Physatocheila smreczynskii China	154.	Monanthia quadrimaculata Wolff
Stephanitis rhododrendri Horváth	-	-
Stephanitis takeyai Drake & Maa	_	
Tingis ampliata (Herrich-Schaeffer)	149.	Monanthia ampliata H. S.
Tingis angustata (Herrich-Schaeffer)	151.	Monanthia angustata H. S.
Tingis cardui (Linnaeus)	151.	Monanthia cardui L.
Tingis carati (Elimaeus) Tingis reticulata Herrich-Schaeffer	150.	Monanthia ciliata Fieb.
Tingis Teliculata Herrich-Schaeffer	132.	Monaninia cittata Fleb.
REDUVIIDAE		
Coranus aethiops Jakovlev	_	-
Coranus subapterus (De Geer)	184.	Coranus subapterus De G.
Coranus woodroffei P.V. Putshkov	-	-
Empicoris baerensprungi (Dohrn)	181.	Ploiariola baerensprungi Dohrn
Empicoris culiciformis (De Geer)	180.	Ploiariola culiciformis De G.
Empicoris vagabundus (Linnaeus)	179.	Ploiariola vagabunda L.
Oncocephalus pilicornis Reuter	-	-
Pygolampis bidentata (Goeze)	182.	Pygolampis bidentata Goeze
Reduvius personatus (Linnaeus)	183.	Reduvius personatus L.
reduvins personants (Elimacus)	103.	Realitius personalius 2.
Nabidae		
Himacerus apterus (Fabricius)	186.	Nabis apterus Fab.
Himacerus boops (Schiødte)	189.	Nabis boops Schiödte
Himacerus major (A. Costa)	188.	Nabis major Cost.
Himacerus mirmicoides (O. Costa)	187.	Nabis lativentris Boh.
Nabis brevis Scholtz	196.	Nabis brevis Scholtz
Nabis ericetorum Scholtz	195.	Nabis ericetorum Scholtz
Nabis ferus (Linnaeus)	193.	Nabis ferus L.
Nabis flavomarginatus Scholtz	190.	Nabis flavomarginatus Scholtz
Nabis limbatus Dahlbom	191.	Nabis limbatus Dahlb.
Nabis lineatus Dahlbom	192.	Nabis lineatus Dahlb.
Nabis pseudoferus Remane	-	-
Nabis rugosus (Linnaeus)	194.	Nabis rugosus L.
Prostemma guttula (Fabricius)	185.	Prostemma guttula Fab.
Trostenina gunua (Tuerretas)	105.	Trostenina gamaa Tuo.
ANTHOCORIDAE		
Acompocoris alpinus Reuter	238.	Acompocoris alpinus Reut.
Acompocoris pygmaeus (Fallén)	237.	Acompocoris pygmaeus Fall.
Anthocoris amplicollis Horváth	-	-
Anthocoris butleri Le Quesne	-	-
Anthocoris confusus Reuter	229.	Anthocoris confusus Reut.
Anthocoris gallarumulmi (De Geer)	231.	Anthocoris gallarum-ulmi De G.
Anthocoris limbatus Fieber	235.	Anthocoris limbatus Fieb.
Anthocoris minki Dohrn	_	-
Anthocoris nemoralis (Fabricius)	230.	Anthocoris nemoralis Fab.
Anthocoris nemorum (Linnaeus)	234.	Anthocoris nemorum Lin.
Anthocoris pilosus (Jakovlev)	-	-
Anthocoris sarothamni Douglas & Scott	232.	Anthocoris sarothamni D. & S.
Anthocoris simulans Reuter		-
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Apolygus lucorum (Meyer-Dür)	297.	Lygus lucorum Mey.
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Lygocoris pabulinus (Linnaeus)	293.	Lygus pabulinus Lin.
Lygocoris rugicollis (Fallén)	292.	Plesiocoris rugicollis Fall.
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Macrotylus paykullii (Fallén)	391.	Macrotylus paykulli Fall.
Macrotylus solitarius (Meyer-Dür)	390.	Macrotylus solitarius Mey.
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Monalocoris filicis (Linnaeus)	321.	Monalocoris filicis Lin.
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Monosynamma maritimum (Wagner)	-	-
Monosynamma sabulicola (Wagner)	-	-
Myrmecoris gracilis (R.F. Sahlberg)	319.	Myrmecoris gracilis Sahlb.
Neolygus contaminatus (Fallén)	294.	Lygus contaminatus Fall.
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Neolygus viridis (Fallén)	295.	Lygus viridis Fall.
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Orthops campestris (Linnaeus)	304.	Lygus pastinacae Fall.
Orthops kalmii (Linnaeus)	305.	Lygus Kalmii Lin.
Orthotylus adenocarpi (Perris)	369.	Orthotylus adenocarpi Perr.
Orthotylus bilineatus (Fallén)	356.	Orthotylus bilineatus Fall.
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Orthotylus flavosparsus (C.R. Sahlberg)	366.	Orthotylus flavosparsus Sahlb.
Orthotylus fuscescens (Kirschbaum)	355.	Orthotylus fuscescens Kb.
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Orthotylus nassatus (Fabricius)	360.	Orthotylus nassatus Fabr.
Orthotylus ochrotrichus Fieber	364.	Orthotylus ochrotrichus Fieb.
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Orthotylus rubidus (Puton)	370.	Orthotylus rubidus Put.
Orthotylus tenellus (Fallén)	359.	Orthotylus tenellus Fall.
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Polymerus unifasciatus (Fabricius)	308.	Poeciloscytus unifasciatus Fabr.
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	167.	
Velia caprai Tamanini	108.	vena currens Faor.
Velia saulii Tamanini	-	-
CERRIE		
GERRIDAE	171	C : P C
Aquarius najas (De Geer)	171.	· ·
Aquarius paludum (Fabricius)	170.	Gerris paludum Fab.
Gerris argentatus Schummel	177.	Gerris argentatus Schum.
Gerris costae (Herrich-Schaeffer)	172.	Gerris lateralis v. costae H. S.
Gerris gibbifer Schummel	175.	Gerris gibbifer Schum.
Gerris lacustris (Linnaeus)	176.	Gerris lacustris L.
Gerris lateralis Schummel	174.	Gerris asper Fieb.
Gerris odontogaster (Zetterstedt)	178.	Gerris odontogaster Zett.
Gerris thoracicus Schummel	173.	Gerris thoracicus Schum.
Limnoporus rufoscutellatus (Latreille)	169.	Gerris rufoscutellatus Ltr.
NEPIDAE		
Nepa cinerea Linnaeus	427.	Nepa cinerea L.
Ranatra linearis (Linnaeus)	428.	Ranatra linearis L.
NAUCORIDAE		
Ilyocoris cimicoides (Linnaeus)	430.	Naucoris cimicoides L.
Naucoris maculatus Fabricius	-	-
APHELOCHEIRIDAE		
Aphelocheirus aestivalis (Fabricius)	429.	Aphelochirus aestivalis Fab. forma montandoni Horv.
NOTONECTIDAE		
Notonecta glauca Linnaeus	431.	· ·
Notonecta maculata Fabricius	431.	
Notonecta obliqua Thunberg	431.	Notonecta furcata Fab. (marginata Müll.)
Notonecta viridis Delcourt	431.	Notonecta halophila Edw.
PLEIDAE		
TO 1	100	DI CONTRACTOR

432. Plea minutissima Fabr.

Plea minutissima Leach

434a. Corixa panzeri Fieb.

CORIXIDAE

Arctocorisa carinata (C.R. Sahlberg) 456. Corixa carinata Sahlb. Arctocorisa germari (Fieber) 457. Corixa germari Fieb. Callicorixa praeusta (Fieber) 452. Corixa praeusta Fieb. Deleted (Brooke, 2006): Corixa sodalis D. & S. 453. Deleted (Brooke, 2006): Corixa boldi D. & S. 451. Callicorixa wollastoni (Douglas & Scott) 452. Corixa praeusta var. wollastoni D. & S.

Deleted (Brooke, 2006): 454. Corixa caledonica Kirk. orixa affinis Leach 434b. Corixa affinis Leach

Corixa affinis Leach
Corixa dentipes Thomson
Corixa iberica Jansson
Corixa panzeri Fieber
Corixa punctata (Illiger)

Hesperocorixa linnaei (Fieber)439.Corixa linnaei Fieb.Hesperocorixa moesta (Fieber)446.Corixa moesta Fieb.Hesperocorixa sahlbergi (Fieber)438.Corixa sahlbergi Fieb.Micronecta griseola Horváth--Micronecta minutissima (Linnaeus)461.Micronecta minutissima Lin.

Micronecta poweri (Douglas & Scott)

- - - Micronecta maridianalia Cost

Micronecta scholtzi (Fieber) 462. Micronecta meridionalis Costa Paracorixa concinna (Fieber) 455. Corixa concinna Fieb.

Sigara distincta (Fieber) 444. Corixa distincta Fieb. Sigara dorsalis (Leach) - -

Sigara iactans Jansson - - - Sigara lateralis (Leach) 437. Corixa hieroglyphica Duf. Sigara limitata (Fieber) 440. Corixa limitata Fieb.

Sigara longipalis (J. Sahlberg)--Sigara nigrolineata (Fieber)450. Corixa nigrolineata Fieb.Deleted (Brooke, 2006):448. Corixa saundersi Kirk.Sigara scotti (Douglas & Scott)449. Corixa scotti ScottSigara selecta (Fieber)436. Corixa selecta Fieb.Sigara semistriata (Fieber)441. Corixa semistriata Fieb.

Sigara stagnalis (Leach)
Sigara striata (Linnaeus)
Sigara venusta (Douglas & Scott)

441. Corixa semistriata Fieb.
443. Corixa striata Lin.
443. Corixa striata Lin.
444. Corixa venusta D. & S.

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BOOK REVIEW:

VERSPREIDINGSATLAS VAN DE BELGISCHE MIRIDAE (INSECTA: HETEROPTERA)
[A DISTRIBUTION ATLAS OF THE BELGIAN MIRIDAE (INSECTA: HETEROPTERA)]

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Further to my review of the Dutch atlas of the Hemiptera-Heteroptera (Ryan, 2015), one of the authors (Dr Berend Aukema) kindly sent a copy of the following work.

Aukema, B., Chérot, F., Viskens, G. & Bruers, J. 2014. *Verspreidingsatlas van de Belgische Miridae (Insecta: Heteroptera)*. Koninklijk Belgisch Instituut voor Natuurwetenschappen, Brussel. ISBN 9789073242326. 311 pages.

Like the Dutch atlas, this book is soft bound and the text is entirely in the Dutch language. It differs in being larger (A4, 30x21cm) and printed in colour, rather than monochrome. I have not been able to find a price for the book on the publisher's website, but it is listed at 45 Euros from an online bookseller (http://www.boek.be). This compares with 10 Euros for the Dutch Miridae atlas (Volume 3) from the publisher, or 30 Euros from an online bookseller (http://www.bol.com).

The structure of the Belgian atlas is almost identical to that of the Dutch atlas. Following a short introductory section, each species is given a separate page, with an introductory page for each subfamily, including illustrations of one or more example insects. The text of each species page is divided into sections covering synonyms (where applicable), references for identification, comments on world distribution, natural history, Belgian status, and references to other relevant publications for that species. Supporting the text are diagrams. A bar-chart shows the seasonal distribution of adults, plotting the number of records for each 10 day period (three per month) through the year, separately for males and females. An area-plotted distribution map covering the whole of Europe shows in which countries the species has been recorded. The geographical distribution within Belgium is shown as spot-plotted maps, one for records prior to 1980 and another for records from 1980 onwards. The spots represent grid squares 5 by 5 km (uurhokken, quarter-hectads). An example species page is shown in Figure 1. The atlas concludes with a reference list, index and five appendices: a systematic listing of the species covered by the volume; a tabulation of record totals by category for each species; a cross-tabulation of records for species by province (the 11 regions of Belgium); a list of the names of contributing recorders; and, additional to the Dutch atlas, a cross-tabulation comparing the list of recorded species for Belgium with the neighbouring countries of Netherlands, Germany and France.

Colour is used in the distribution maps, and the drawings of example insects of the Dutch atlas are replaced by colour photographs in the Belgian atlas.

Naturally, my highly positive review of the Dutch atlas applies to the Belgian text. But, to compare the two books, I prefer the format of the Dutch atlas. The colour printing of the Belgian book is probably not worth the higher price tag. Also, the larger size of the Belgian text makes it cumbersome to use, and is no clearer than the Dutch book. However, I am as glad to have the Belgian atlas on my

bookshelf as I am the three volumes of the Dutch atlas, and very much hope that this publication initiative extends to other countries.

I am most grateful to Dr Aukema for sending me the Belgian atlas for review.

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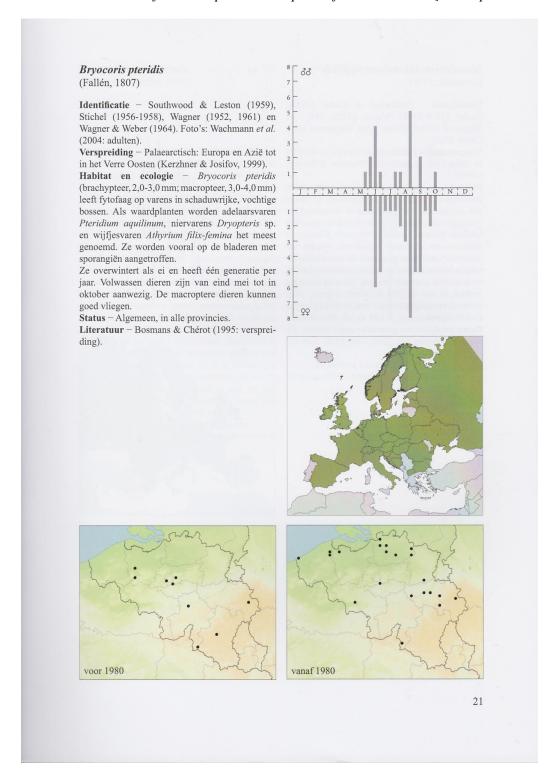


FIGURE 1. An example species page from the atlas.

AN ANNOTATED CHECKLIST OF THE AMBIGUOUS SPECIES NAMES OF HEMIPTERA-HETEROPTERA FROM BUTLER (1923) TO MASSEE (1955)

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This article is a prequel to Ryan (2015), which lists the ambiguous species names which affected the updating of the county distribution of Massee (1955) to produce the new county distribution of Ryan (2014). The present article lists the additional ambiguous species names that arose in the period between the publication of Butler (1923) and Massee (1955), and thereby assists in the interpretation of county records published in the interval between. As stated previously, the significance of ambiguous species names is that once it is discovered that two distinct species have been recorded under the same name, all previous records must be discounted, unless they are supported by authenticated specimens. The additional ambiguous species names are as follows.

SCUTELLERIDAE

Eurygaster maura (Linnaeus)

Prior to China (1927), this name was believe to represent a single species in Britain. In fact, there were two species: *Eurygaster maura* (Linnaeus) and *Eurygaster testudinaria* (Geoffroy). The latter proved to be the more common and widely distributed species.

ANTHOCORIDAE

Orius niger (Wolff), formerly Triphleps nigra Wolff

When Britten (1939) reported *Orius laevigatus* (Fieber), formerly *Triphleps laevigata* Fieber, as new to Britain, it was discovered that many specimens standing under the above name in British collections were in fact the new species. Both were widely distributed, and there had clearly been confusion between them.

MIRIDAE

Orthotylus ochrotrichus Fieber

Orthotylus prasinus (Fallén)

Southwood & Leston (1959) states that these two species have been confused and that all 'early' records should be discounted, citing Southwood (1953) as authority. No evidence is given, and I have found none in the literature since Butler (1923). The species are easily separated by examination of the male genitalia, and I presume that the confusion only arises where identification is made without reference to these features, and therefore depends upon the experience and expertise of the worker. Such misidentification issues are widespread within the Hemiptera-Heteroptera, and are not regarded as genuine ambiguities.

VELIIDAE

Microvelia reticulata (Burmeister)

When Walton (1939) added *Microvelia pygmaea* (Dufour) to the British list, several British specimens were found in collections standing under the above name. Brown (1954) reports the new species as rare, and it is likely that the confusion since Butler (1923) is slight. The confusion prior to Butler's text is probably more significant, as the name *Microvelia pygmaea* was once thought to represent all British examples of this genus.

Velia currens (Fabricius)

Brown (1951) reported that this species was not British, and that two other species had been recorded in the British Isles under this name: *Velia caprai* Tamanini and *Velia saulii* Tamanini. Given that the above name has been replaced by two new ones, the confusion over identity is clear. However, the name will become ambiguous if the genuine *V. currens* ever becomes a British species.

GERRIDAE

Gerris lateralis Schummel

Butler (1923) refers to *Gerris costae* (Herrich-Schaeffer) as *Gerris lateralis* v. *costae* H. S., whereas the genuine *G. lateralis* goes by the name *Gerris asper* Fieb. There is clearly a possibility of ambiguity in the use of the above name in old records, although I have not found a documented example of this in the literature following the publication of Butler's text.

NOTONECTIDAE

Notonecta glauca Linnaeus

At one time, all four British species of *Notonecta* Linnaeus went by the above name. Butler (1923) expresses sympathy for the view that the four forms are merely varieties of a single species, and presents them in a single numbered account under the above name. However, he does gives a separation for the four forms. There is an obvious possibility of ambiguity in old records for *N. glauca*.

CORIXIDAE

Glaenocorisa Thomson

Butler (1923) refers to animals of this genus as *Glaenocorisa cavifrons* (Thomson), but Southwood & Leston (1959) employs the label *Glaenocorisa propinqua* (Fieber). Massee (1955) lists the form as two subspecies, *G. p. propinqua* and *G. p. cavifrons*. Only recently have these subspecies been recognised as deserving specific rank (Ryan, 2013). Clearly, prior records for this genus are only reliable if the particular subspecies is made clear, or they are supported by authenticated specimens.

Hesperocorixa moesta (Fieber), formerly Corixa moesta Fieber and Sigara moesta (Fieber)

China (1933) reported that specimens standing under the above name were a mixture of this species and *Hesperocorixa castanea* (Thomson). The latter species was found to be the more widely distributed form.

Micronecta minutissima (Linnaeus)

Prior to Walton (1938), the most widely distributed species of this genus went by the above name, but Walton showed that it was actually *Micronecta poweri* (Douglas & Scott). The true *M. minutissima* was found to be a seldom encountered species in the British Isles.

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COMPLETING THE TROIKA OF MISTLETOE HEMIPTERA-HETEROPTERA IN WATSONIAN OXFORDSHIRE (VC23)

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Until recently, none of the three species of Hemiptera-Heteroptera associated with mistletoe, *Viscum album* L. (Santalaceae), had been recorded from Watsonian Oxfordshire (VC23). The frequent inaccessibility of their host plant, which is usually to be found out of reach, high up in the trees from which it grows, causes these species to be under-recorded, as their somewhat scattered county distributions testify (Ryan, 2014a & 2014b).

However, in 2012 I discovered a small example of accessible mistletoe growing from a young rowan, *Sorbus aucuparia* L. (Rosaceae), outside St Mary's Church, High Street, Oxford (National Grid Reference SP51570621). Regular monitoring eventually produced a specimen of one of the mistletoe bugs, *Anthocoris visci* Douglas (Anthocoridae) (Ryan, 2014c). The challenge now was to record the remaining pair of the troika, as the mistletoe (hopefully) became fully colonised.

On 4 July 2015, my continued vigilance was rewarded with three specimens of *Hypseloecus visci* (Puton) (Miridae). This species was first recorded from Britain only a decade ago (Gibbs & Nau, 2005), and has previously been reported from only six counties (Figure 1).

So, where is *Pinalitus viscicola* (Puton) (Miridae), the final member of the trio? This long-standing British species is supposedly the most likely to be recorded, having a more widespread distribution (Figure 2), and not being regarded as scarce, unlike the Notable B *A. visci* (Kirby, 1992).

This final record for Oxfordshire was soon obtained, not from St Mary's, but from Holywell Cemetery, St Cross Road, Oxford (SP52000663), where a mature growth of accessible mistletoe was found on a cherry tree, *Prunus* sp. (Rosaceae), on 15 August 2015. Among several dozen examples of *H. visci*, were beaten five specimens of *P. viscicola*. A return visit to St Mary's four days later, produced two more specimens of *H. visci*, but *P. viscicola* was not found. Clearly, St Mary's must wait a little longer to support the complete set of mistletoe Hemiptera-Heteroptera.

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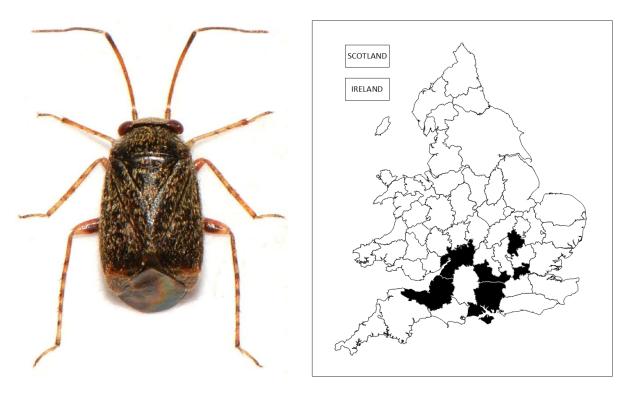


FIGURE 1. Hypseloecus visci and its county distribution (Ryan, 2014a & 2014b).

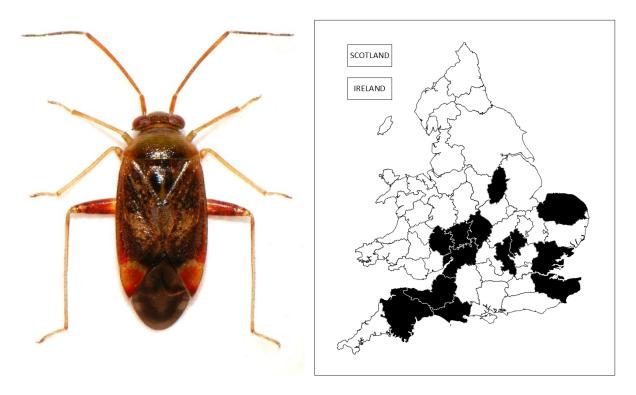


FIGURE 2. Pinalitus viscicola and its county distribution (Ryan, 2014a & 2014b).

THE DIVISION OF RYAN'S LIST OF HEMIPTERA-HETEROPTERA FOR IRELAND INTO VICE-COUNTY LISTS FOR H1 TO H40

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Introduction

The county list of Hemiptera-Heteroptera for Ireland in Ryan (2014) was compiled from that of Massee (1955) with additional records from the national entomological literature published in the six decades between these two papers. Ryan did not consider the Irish literature, in particular Halbert (1935), and did not attempt to divide the list for Ireland into separate lists for its constituent vice-counties, which are the basis of modern recording. The present paper addresses these shortcomings, adding new Irish records and dividing the Irish list into separate lists for the forty vice-counties, H1 to H40.

The vice-county records were interpreted by taking into account the name changes and confusions over identity documented in Ryan (2012, 2013, 2014, 2015, 2016a & 2016b). The advice of O'Connor & Nelson (2012) has been followed for records of *Glaenocorisa* Thomson, regarding them all as *Glaenocorisa propinqua* (Fieber). The resulting vice-county lists include 2573 records, compared with 316 for the original Irish list. The list for Ireland as a whole has shortened by 20, the decrease arising from two species added to the list and 22 deleted from it due to the known records being insufficiently precise to be allocated to a particular vice-county.

The lists for the Irish vice-counties, which will appear in the next edition of the county distribution, are presented in Table 1. The species that are new to Ryan's list for Ireland are marked "[+]", and the deleted species are marked "[-]". The records are represented by numbers, relating to the articles from which they were obtained, as indicated in Table 2.

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TABLE 1. The divided county records. The references relating to the numbers are listed in Table 2.

	H1 - South Kerry	H2 - North Kerry	H3 - West Cork	H4 - Mid-Cork	H5 - East Cork	H6 - Waterford	H7 - South Tipperary	H8 - Limerick	H9 - Clare	H10 - North Tipperary	H11 - Kilkenny	H12 - Wexford	H13 - Carlow	H14 - Laois	H15 - South-east Galway	H16 - West Galway	H17 - North-east Galway	H18 - Offaly	H19 - Kildare	H20 - Wicklow
Aradidae																				
Aradus depressus (Fabricius)	•	0	•	•	•	٠	٠	٠	•	•	•	•	٠	٠	0	•	•	•	•	٠
Acanthosomatidae																				
Acanthosoma haemorrhoidale (Linnaeus)	0	0	0	•	•	0	٠	٠		•		0	٠		•	-	0	•	0	0
Cyphostethus tristriatus (Fabricius)	٠	•	•	٠	٠	٠	٠	٠	٠	45	٠	٠	٠	٠	51	٠	٠	٠	٠	٠
Elasmostethus interstinctus (Linnaeus)	0	0	0	•	0	0	٠	٠	•	•	•	0	٠	٠	0	•	•	•	5	0
Elasmucha grisea (Linnaeus)	•	0	0	•	0	•	٠	٠	•	•	•	0	٠	٠	•	•	•	•	0	0
Cydnidae																				
Sehirus luctuosus Mulsant & Rey				٠	•	٠	•	•	•		0	•	٠	٠	•	•	•	٠	0	
Thyreocoridae																				
Thyreocoris scarabaeoides (Linnaeus)				٠	•	٠	•	•	•			0	٠	٠	•	•	•	٠	•	٠
Scutelleridae																				
Eurygaster testudinaria (Geoffroy)	0	14	0		0	0	0	•	49			0	٠		٠	٠	٠	٠		0
Pentatomidae																				
Chlorochroa juniperina (Linnaeus) [-]				٠	•	٠	•	•	•			•	٠	٠	•	•	•	٠	•	
Dolycoris baccarum (Linnaeus)	0	0	0	0	0	0	•	•	48	•	0	0	•	•	•	0	•	•	5	0
Palomena prasina (Linnaeus)	0	0	0	0	0	0	0	0	0		0	0	0		•	0	0	•	5	0
Pentatoma rufipes (Linnaeus)	0	0	0	0	0	0	0	•	0	0	0	٠	٠		٠	0	1	٠	0	0
Picromerus bidens (Linnaeus)	0	0	0		0	0	0	•	•		0				•	0	•	•	0	0
Piezodorus lituratus (Fabricius)	0		0		0	0	0	•	•		0	0		0	•	0	0	•	0	0
Rhacognathus punctatus (Linnaeus)					•	0	•	•	•		0	•	•		•	•	•	•	50	
Troilus luridus (Fabricius)	0	0			٠	0	0	0	0			٠	٠		0	0	0	٠		0
Zicrona caerulea (Linnaeus)	44			0	٠		•	•	٠	0	0	0	0		0	٠	٠	0		0
Coreidae																				
Coreus marginatus (Linnaeus)	0	0	0		0	0	•	•	•		0	0			•	•	•	•		0
Coriomeris denticulatus (Scopoli) [-]					•	•	•	•	•			•	•		•	•	•	•		
Leptoglossus occidentalis Heidemann					•	•	•	•	•			52	•		•	•	•	•		
Alydidae																				
Alydus calcaratus (Linnaeus)	٠				٠		•	•	٠			٠	٠		٠	٠	٠	٠		
Rhopalidae																				
Corizus hyoscyami (Linnaeus)	•	•	•	•	•	•	٠	٠	•	•	•	0	٠	٠	•	•	•	•	•	0
Liorhyssus hyalinus (Fabricius)	•	0	•	•	•	•	٠	٠	•	•	•	•	٠	٠	•	•	•	•	•	•
Rhopalus parumpunctatus Schilling [-]	•	•	•	•	•	•	٠	٠	•	•	•	•	٠	٠	•	•	•	•	•	•
Stenocephalidae																				
Dicranocephalus agilis (Scopoli)	٠	•	0	٠	٠	0	٠	٠	٠	٠	٠	0	٠	٠	٠	٠	٠	٠	٠	0
Lygaeidae																				
Acompus rufipes (Wolff) [-]	٠	•	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠
Chilacis typhae (Perris)	٠	•	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠
Cymus claviculus (Fallén)	0	•	•	٠	•	٠	٠	٠	٠	٠					٠			٠	٠	0
Cymus glandicolor Hahn	0	0	٠	٠	0	0	0	0	0	•					0			٠	0	0
Drymus brunneus (R.F. Sahlberg)	•	0	٠	٠	٠	٠	٠	٠	•	٠					•	0	٠	٠	•	0
Drymus pilicornis (Mulsant & Rey)	•	٠	٠	٠	٠	٠	٠	٠	25	٠	٠	٠	٠	٠	•	٠	٠	٠	•	٠
Drymus ryeii Douglas & Scott	0	-	0		٠	٠	٠	٠	•	٠	٠	٠	٠	٠	•	٠	٠	٠	•	0
Drymus sylvaticus (Fabricius)	0														•					
Gastrodes grossipes (De Geer)	0	0													•					0
Heterogaster urticae (Fabricius)					•	•	٠	٠	•	•	•	53	•	•	•	٠	٠	•		

High public																					
Aradus depressus (Fabricius) Acanthosomatidae Acanthosoma haemorrhoidale (Linnaeus) Cyphostethus tristriatus (Fabricius) Elasmostethus interstinctus (Linnaeus) Cydnidae Sehirus Incutosus Mulsant & Rey Thyreocoris scarabaeoides (Linnaeus) Elasmostethus interstinctus (Geoffroy) Pentatomidae Eurygaster testudinaria (Geoffroy) Pentatomidae Eurygaster testudinaria (Linnaeus) Pentatomidae Eurygaster testudinaria (Geoffroy) Pentatomidae Eurygaster International (Linnaeus) Pentatomidae International (Linnaeus) Picromerus bidens (Linnaeus) Picromerus marginatus (Linnaeus) Picromos marginatus (Linnaeus) Picromos pidens (Molff) [-] Putro pidens (Mulsia (Rebericus) Picromos pidens (Molff) [-] Picromos pidens (Molff) [- 1	3	1	1	- 1	Ĺ	- 1	$\overline{}$	- 1	1	- 1	- 1	1	1	- 1	- 1	- 1	- 1	- 1
Acanthosoma haemorrhoidale (Linnaeus)																					
Acanthosoma haemorrhoidale (Linnaeus)	*		•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•	•	٠	•
Cyphostethus tristriatus (Fabricius) 34			_	_					_			_								_	_
Elasmostethus interstinctus (Linnaeus)		1		0	٠	0	٠	0	0	•	٠	0	•	0	•	٠	•	0	0		0
Elasmucha grisea (Linnaeus)			•	٠	•	•	•	٠	•	•	•	•	•	•	•	٠	•	٠	•		•
Cydnidae Sehirus luctuosus Mulsant & Rey Thyreocoridae Thyreocoris scarabaeoides (Linnaeus) Scutelleridae Eurygasser testudinaria (Geoffroy) Pentatomidae Chlorochroa juniperina (Linnaeus) [-] Dolycoris baccarum (Linnaeus) 0 Palomena prasina (Linnaeus) 51 40	· · · · · · · · · · · · · · · · · · ·	_	•	0	•	•	•	0	•	•	•	•	•	•	•	0	•	0	•	~	•
Sehirus luctuosus Mulsant & Rey Thyreocoridae Thyreocoris scarabaeoides (Linnaeus) Thyreocoris scarabaeoides (Linnaeus) Scutelleridae Eurygaster testudinaria (Geoffroy) Pentatomidae Chlorochroa juniperina (Linnaeus)		0	•	•	•	0	٠	٠	•	•	•	•	•	٠	0	٠	•	0	0	0	•
Thyreocoris scarabaeoides (Linnacus) Scutelleridae Eurygaster testudinaria (Geoffroy) Pentatomidae Chlorochroa juniperina (Linnacus) [-] Dolycoris baccarum (Linnacus) Palomena prasina (Linnacus) Palomena prasina (Linnacus) Pieromerus bidens (Linnacus) Pierodorus lituratus (Fabricius) Rhacognathus punctatus (Linnacus) Zicrona caerulea (Linnacus) Coreidae Coreus marginatus (Linnacus) Coriomeris denticulatus (Scopoli) [-] Leptoglossus occidentalis Heidemann Alydidae Alydus calcaratus (Linnacus) Coriomeris shyoscyami (Linnacus) Coriomeris hyoscyami (Linnacus) Coriomeris h																					
Thyreocoris scarabaeoides (Linnaeus) Scutelleridae Eurygaster testudinaria (Geoffroy)	=		•	٠	•	•	٠	٠	•	•	•	•	٠	٠	•	•	•	•	•	•	٠
Scutelleridae Eurygaster testudinaria (Geoffroy) Pentatomidae Chlorochroa juniperina (Linnaeus)	1 *																				
Eurygaster testudinaria (Geoffroy)			•	٠	•	•	٠	٠	•	•	•	•	٠	٠	•	•	•	•	•	•	٠
Pentatomidae Chlorochroa juniperina (Linnaeus) [-]																					
Chlorochroa juniperina (Linnaeus) -			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Dolycoris baccarum (Linnaeus)																					
Palomena prasina (Linnaeus)			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Pentatoma rufipes (Linnaeus)			•	•	•	•	•	O	•	•	•	•	•	•	•	•	•	•	•	•	•
Picromerus bidens (Linnaeus)			•	٠	•	•	51		•	•	•	•	٠	٠	•	•	•	51	51	51	٠
Piezodorus lituratus (Fabricius)	* *		•	•	•	•	•	U	U	U	•	•	•	•	•	•	•	U	1	•	•
Rhacognathus punctatus (Linnaeus)		_	•	U	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Troilus luridus (Fabricius) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	•	•	•	•	•	•	•	•	•	•	•	· ~1	•	•	-	-		0	
Zicrona caerulea (Linnaeus)			•		•	•	•	•	•	•	•						40	•		40	40
Coreidae Coreus marginatus (Linnaeus) Coriomeris denticulatus (Scopoli) [-] Leptoglossus occidentalis Heidemann Alydidae Alydus calcaratus (Linnaeus) Rhopalidae Corizus hyoscyami (Linnaeus) Liorhyssus hyalinus (Fabricius) Rhopalus parumpunctatus Schilling [-] Stenocephalidae Dicranocephalus agilis (Scopoli) Lygaeidae Acompus rufipes (Wolff) [-] Chilacis typhae (Perris) Cymus claviculus (Fallén) Cymus glandicolor Hahn Drymus brunneus (R.F. Sahlberg) Drymus pricornis (Mulsant & Rey) Drymus ryeii Douglas & Scott Drymus sylvaticus (Fabricius) Gastrodes grossipes (De Geer) 0		0	•	0	•	•	•	•	•	•	•	U	٠	•		•	•	•	U	•	•
Coreus marginatus (Linnaeus)	· · · · · · · · · · · · · · · · · · ·		•	U	•	•	•	•	•	•	•	•	٠	•	U	•	•	•	•	•	•
Coriomeris denticulatus (Scopoli) [-] Leptoglossus occidentalis Heidemann																					
Leptoglossus occidentalis Heidemann			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Alydidae Alydus calcaratus (Linnaeus) 17 Rhopalidae Corizus hyoscyami (Linnaeus)			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	· ~^	•	•
Alydus calcaratus (Linnaeus)	1 0		•	•	•	•	•	•	•	•	•	•	٠	•	•	•	•	•	50	•	•
Rhopalidae Corizus hyoscyami (Linnaeus)	•																		17		
Corizus hyoscyami (Linnaeus)			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	1 /	•	•
Liorhyssus hyalinus (Fabricius) 0 42 42 82 Rhopalus parumpunctatus Schilling [-]																					
Rhopalus parumpunctatus Schilling [-]			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	42	•	•
Stenocephalidae Dicranocephalus agilis (Scopoli)		10	•	٠	•	•	•	•	•	٠	•	•	٠	•	•	•	•	•	42	•	•
Dicranocephalus agilis (Scopoli)		'	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Lygaeidae Acompus rufipes (Wolff) [-]																					
Acompus rufipes (Wolff) [-]		'	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Chilacis typhae (Perris) 0			_	_			,	,	,					,	,	_	_			_	
Cymus claviculus (Fallén)		,	•	•	·	•	0	•	•	•	•	·	•	•	•	·	•	·	•	•	•
Cymus glandicolor Hahn 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0			•	•			<i>j</i>	•					•	•	•	•	•		•	•	•
Drymus brunneus (R.F. Sahlberg)		١		0				0											0	0	·
Drymus pilicornis (Mulsant & Rey)		'																			
Drymus ryeii Douglas & Scott	•																				
Drymus sylvaticus (Fabricius) $0.54 \cdot \cdot$								0													
Gastrodes grossipes (De Geer) $0 \cdot \cdot \cdot \cdot \cdot 0 \cdot 0 \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot \cdot 0$		\ \frac{1}{2}	51					-							0			0	U	0	
				•	•	•	•							•		•	•				_
	Heterogaster urticae (Fabricius)	0	•	•		•								•	•	•	•	•	•	•	

	H1 - South Kerry	H2 - North Kerry	H3 - West Cork	H4 - Mid-Cork	H5 - East Cork	H6 - Waterford	H7 - South Tipperary	H8 - Limerick	H9 - Clare	H10 - North Tipperary	H11 - Kilkenny	H12 - Wexford	H13 - Carlow	H14 - Laois	H15 - South-east Galway	H16 - West Galway	H17 - North-east Galway	H18 - Offaly	H19 - Kildare	H20 - Wicklow
Lygaeidae (continued)																				
Ischnocoris angustulus (Boheman)			0	•																
Ischnodemus sabuleti (Fallén)																				0
Kleidocerys ericae (Horváth)																				
Kleidocerys resedae (Panzer)		0				0													0	0
Lamproplax picea (Flor)	14	0																		•
Lasiosomus enervis (Herrich-Schaeffer)						0														
Macrodema microptera (Curtis)			0													0				0
Megalonotus chiragra (Fabricius) [-]																				
Megalonotus dilatatus (Herrich-Schaeffer)		0																		
Nysius thymi (Wolff)	30																			
Pachybrachius fracticollis (Schilling)	30		0		0															0
Peritrechus geniculatus (Hahn) [-]																				
Peritrechus lundii (Gmelin)																			5	0
Plinthisus brevipennis (Latreille)																				0
Scolopostethus affinis (Schilling)		0		0		0					0	0	0				7			
Scolopostethus decoratus (Hahn)	0	0				0									0	0	0		0	0
Scolopostethus grandis Horváth																				•
Scolopostethus puberulus Horváth												20								
Scolopostethus thomsoni Reuter	0	0				54			0								0		0	0
Stygnocoris fuligineus (Geoffroy)	0	0	0		0	0			0		54		0							0
Stygnocoris rusticus (Fallén)		0	0		0	0			48						0	0	0			0
Stygnocoris sabulosus (Schilling)	0	14	-		0	0			30			0				0	-		0	0
Taphropeltus contractus (Herrich-Schaeffer)		•	0																	•
Trapezonotus arenarius (Linnaeus) [-]																				
Berytidae																				
Berytinus clavipes (Fabricius)									46											
Berytinus minor (Herrich-Schaeffer)			0												0					
Berytinus montivagus (Meyer-Dür)				38					38			51								
Berytinus signoreti (Fieber)	30								30											
Gampsocoris punctipes (Germar)																				
Metatropis rufescens (Herrich-Schaeffer)		14	38						38			38				27		38	38	
Neides tipularius (Linnaeus)																				
Piesmatidae																				
Parapiesma quadratum (Fieber)	0	0							0			0								
Piesma maculatum (Laporte)																				0
Tingidae																				_
Acalypta brunnea (Germar)		0														0				•
Acalypta carinata (Panzer)		0				0										0				•
Acalypta nigrina (Fallén) [-]	.																			
Acalypta parvula (Fallén)	14	0				0										0				0
Derephysia foliacea (Fallén)	1	-														0				
Dictyla convergens (Herrich-Schaeffer)	.					0		0	0			0					0			0
Kalama tricornis (Schrank)	.								0											0
Tingis cardui (Linnaeus)	0	0							49											0
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	lin	th	Westmeath	Longford	Roscommor	East Mayo	West Mayo	0	Leitrim	an	ιh	Monaghan	Fermanagh	East Donegal	t D	Tyrone	Armagh	Ĺ.	in	Londonderry
	Dublin	Meath	Ves	on	SOS	ast	Ves	Sligo	eit	Cavan	Louth	Aor	èrr	ast	Ves	Ž	Ę	Down	Antrim	,ono
	\Box	- 1	<u> </u>	Τ-	- K	- 1	^	S	1	-	7	- 1	- 1	- 1	- 1	- 1	- 1	- 1	ı	\Box
	H21	H22	H23	H24	H25	H26	H27	H28	H29	H30	H31	H32	H33	H34	H35	H36	H37	H38	H39	H40
	H	王	王	Ξ	Ξ	Ή	Ξ	H	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Ξ	Η	王	五
Lygaeidae (continued)																				
Ischnocoris angustulus (Boheman)	•	٠	٠	٠	٠	•	٠	•	•	•	•	•	•	•	•	٠	•		٠	٠
Ischnodemus sabuleti (Fallén)	•	٠	٠	٠	٠	•	٠	•	•	•	•	•	•	•	•	٠	•		٠	٠
Kleidocerys ericae (Horváth)	•	3	٠	٠	٠	•	٠	•	•	•	•	•	•	•	•	٠	•	45	٠	٠
Kleidocerys resedae (Panzer)	0	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠
Lamproplax picea (Flor)		٠	٠	٠	٠	•	•	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	
Lasiosomus enervis (Herrich-Schaeffer)		٠	٠	٠	٠	•	•	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	
Macrodema microptera (Curtis)	0	٠	٠	٠	٠	•	٠	•	•	•	•	•	٠	٠	•	٠	•	٠	٠	٠
Megalonotus chiragra (Fabricius) [-]		٠	٠	•	٠	•	•	•	٠	٠	•	•	٠	٠	٠	٠	٠	•	•	٠
Megalonotus dilatatus (Herrich-Schaeffer)		٠	٠	•	٠	•	•	•			•	•	٠	٠	٠	٠	٠	•	•	٠
Nysius thymi (Wolff)		٠	٠	•	٠	•	•	•			•	•		٠	٠	٠	٠	•	•	٠
Pachybrachius fracticollis (Schilling)		٠	٠	•	•	•	•	•	•	•	•	•	42	٠	٠	٠	•	•	•	
Peritrechus geniculatus (Hahn) [-]		•	•	٠	•	•	٠	•	•	•	٠	٠	٠	٠	٠	٠	•	•	٠	•
Peritrechus lundii (Gmelin)		٠	٠	•	•	•	•	•	•	•	•	•	•	•	٠	٠	•	•	•	
Plinthisus brevipennis (Latreille)		•	•	•		•		•			٠	٠	٠	٠	•	•	•	•	•	•
Scolopostethus affinis (Schilling)	0	•		•		•	•	•		•		٠	٠	•	•	•	0	•	0	•
Scolopostethus decoratus (Hahn)	0	•	O	•		•	0	0	٠	0	0	٠	٠	0	•	•	0	•	•	•
Scolopostethus grandis Horváth		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	20	•	•	•
Scolopostethus puberulus Horváth		•	•	•	•	•	•		•	•		•	•	•	•	20		•		
Scolopostethus thomsoni Reuter	0	•	•	•	•	•		0	•	•	U	٠	•	•	•	•	0	•	U	
Stygnocoris fuligineus (Geoffroy)	0	•	•	•	•	•	0	0	•	•	•	•	•	•	•	•	0	•		•
Stygnocoris rusticus (Fallén)	$\begin{bmatrix} 0 \\ 0 \end{bmatrix}$			•	•	•	0	•	•	0	•	•	•		•	•	0	•	0	•
Stygnocoris sabulosus (Schilling) Taphropeltus contractus (Herrich-Schaeffer)	0	U	U	•	•	•	U	•	•	U	•	•	•	0	•	•	U	•	U	•
Trapezonotus arenarius (Linnaeus) [-]	U	•	•	·	•	•	•	•	•	•	•	•	•	•	•	•	·	•	·	•
Berytidae	'	•	•	•	•	•	·	•	•	•	•	•	•	•	•	•	•	•	·	•
Berytinus clavipes (Fabricius)															_					
Berytinus minor (Herrich-Schaeffer)																i			0	
Berytinus montivagus (Meyer-Dür)	37																	45		
Berytinus signoreti (Fieber)																		•		
Gampsocoris punctipes (Germar)	0																	17		
Metatropis rufescens (Herrich-Schaeffer)																		42		
Neides tipularius (Linnaeus)																		10		
Piesmatidae	ľ																			
Parapiesma quadratum (Fieber)	0						0													
Piesma maculatum (Laporte)																				
Tingidae																				
Acalypta brunnea (Germar)	0						0								0	0	0			
Acalypta carinata (Panzer)																				
Acalypta nigrina (Fallén) [-]																				
Acalypta parvula (Fallén)	0						0							0	0		0		0	
Derephysia foliacea (Fallén)	0						0													
Dictyla convergens (Herrich-Schaeffer)	0		0																	
Kalama tricornis (Schrank)	0													0			0			
Tingis cardui (Linnaeus)	0	•	•			•			•	•	•	•	•	0	•	•	0	•	_	

	H1 - South Kerry	H2 - North Kerry	H3 - West Cork	H4 - Mid-Cork	H5 - East Cork	H6 - Waterford	H7 - South Tipperary	H8 - Limerick	H9 - Clare	H10 - North Tipperary	H11 - Kilkenny	H12 - Wexford	H13 - Carlow	H14 - Laois	H15 - South-east Galway	H16 - West Galway	H17 - North-east Galway	H18 - Offaly	H19 - Kildare	H20 - Wicklow
Reduviidae																				
Empicoris culiciformis (De Geer)		•	•	•	٠	٠	•	٠	•	•	•	•	٠	•	٠	•	•	•	٠	•
Empicoris vagabundus (Linnaeus)	14	٠	0	٠	٠	0	•	٠	٠	•	٠	٠	•	41	•	٠	٠	٠	41	•
Nabidae																				
Himacerus boops (Schiødte)		٠	٠	٠	•	٠	•	٠	٠	•	٠	٠	•	٠	•	25	٠	٠	٠	•
Himacerus major (A. Costa)	30		•	٠	0	٠	٠	٠	8			0	٠	٠	٠		٠	٠	7	0
Himacerus mirmicoides (O. Costa)	0	0	0	٠	0	0	0	٠	48	•	0	0	٠	٠	٠	0	7	٠	٠	0
Nabis ericetorum Scholtz	0	0	0	٠	•	0	0	٠	8	•	0	•	0	•	•	•	0	0	7	0
Nabis ferus (Linnaeus)	0	0	0	0	0	0	•	٠	•	•	٠	0	•	•	•	•	•	•	٠	0
Nabis flavomarginatus Scholtz	0	0	0	0	0	0	0	0	0	•	0				0			31	0	0
Nabis limbatus Dahlbom	0	0	0	٠	0	0	0	0	0	•	0	0	31	0	•	0	0	•	0	0
Nabis lineatus Dahlbom	39	•	0	•	0	0	•	٠	•	•	•	•	٠	•	٠	•	•	•	•	0
Nabis rugosus (Linnaeus)	0	0	0	٠	0	0	٠	0	0	•	0	0	٠	٠	٠	٠	0	٠	5	0
Anthocoridae																				
Acompocoris alpinus Reuter		14	•	٠	٠	٠	٠	٠	٠	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠
Acompocoris pygmaeus (Fallén)		0	•	•	٠	•	•	0	٠	•	•	0	٠	•	٠	•	0	•	0	0
Anthocoris butleri Le Quesne		•	•	٠	•	•	•	٠	•	•	٠	•	•	•	•	•	•	•	٠	16
Anthocoris confusus Reuter	14	0	0	٠	0	0	0	٠	49		0	0	٠	٠	٠		0	٠	0	0
Anthocoris gallarumulmi (De Geer)		•	•	•	٠	•	•	٠	•	•	•	•	٠	•	٠	•	•	•	•	•
Anthocoris limbatus Fieber		0		٠	•	•	•	٠	•	•	٠	•	•	•	•	•	•	•	0	•
Anthocoris nemoralis (Fabricius)	0	0	0	٠			0		٠		•	0	•	٠	•	٠	0	•	0	0
Anthocoris nemorum (Linnaeus)	0	0	0	٠	0	0	0	•	30	0	•	0	•	9	•	0	•	•	5	0
Anthocoris sarothamni Douglas & Scott					•			٠	٠		•		•		•				•	0
Anthocoris simulans Reuter	51	٠	51	٠					51									•	٠	
Dufouriellus ater (Dufour)					•															•
Lyctocoris campestris (Fabricius)		0	•		•	0		•	•		•	0	•		•	•	•		0	0
Orius laevigatus (Fieber)		36			•	•		•	•		•	54	•		•		•		3	
Orius laticollis (Reuter)					•	•			25		•		•		•					•
Orius majusculus (Reuter)					•			٠	٠		•		•		•				3	
Orius niger (Wolff) [-]					•	•					•		•		•					
Temnostethus gracilis Horváth	14	14		٠	35	٠		•		•	•	35	•	٠	•	35	35	•	٠	35
Temnostethus pusillus (Herrich-Schaeffer)									٠											
Temnostethus tibialis Reuter					•			٠	•		•		•		•				35	
Tetraphleps bicuspis (Herrich-Schaeffer)		0							٠										-	0
Xylocoris cursitans (Fallén) [-]																				•
Xylocoris galactinus (Fieber)		0	•		•	•		•	•		•	28	•		•	•	•			•
Cimicidae																				
Cimex lectularius Linnaeus	•																			•
Cimex pipistrelli Jenyns	•				21	21		٠			•		•		•		21			•
Oeciacus hirundinis (Lamarck)	•							٠			•		•		•					•
Microphysidae																				
Loricula elegantula (Baerensprung)	0	0		•	•															
Loricula exilis (Fallén)	•	0			•	•			•		0						0		•	0
Loricula inconspicua (Douglas & Scott)	•			•	•	•					•	0	•		•					•
Loricula pselaphiformis Curtis	.																			

	1																			
	Dublin	Meath	Westmeath	Longford	Roscommon	East Mayo	West Mayo	Sligo	eitrim	Cavan	Louth	Monaghan	Fermanagh	East Donegal	West Donegal	Tyrone	Armagh	Down	Antrim	Condonderry
	ĮĄ.	Ň	X	- Lo	- R	- Ea	×	- Sli	- Le	C ₂	- L	Ĭ	- Fe	- Ea	<u> </u>	- T	- Ar	ŏ	- Ar	- 10
	H21	H22	H23	H24	H25	H26	H27	H28	H29	H30	H31	H32	H33	H34	H35	H36	H37	H38	H39	H40
	田田	H	H	H	H	H	Η	H	H	H	H	H	H	Η	H	H	H	H	H	H
Reduviidae																				
Empicoris culiciformis (De Geer)	0	•	•	•	٠	•	٠	•	•	•	•	•	•	•	٠	•	0	•	٠	•
Empicoris vagabundus (Linnaeus)	41	٠	٠	٠	٠	٠	٠	•	٠	٠	٠	٠	٠	•	٠	٠	٠		٠	•
Nabidae																				
Himacerus boops (Schiødte)		•	•	•	٠	•	٠	•	•	•	•	•	•	•	٠	•	•	•	٠	•
Himacerus major (A. Costa)	0	•	•	٠	•	٠	٠	•	•	•	٠	٠	٠	٠	٠	•	٠	٠	•	٠
Himacerus mirmicoides (O. Costa)	0	٠	٠	٠	٠	٠	٠	•	٠	٠	٠	٠	٠	•	٠	٠	0		٠	0
Nabis ericetorum Scholtz	0	٠	٠	٠	٠	٠	٠	•	٠	٠	٠	٠	٠	•	٠	٠	•		٠	•
Nabis ferus (Linnaeus)	0	54	0	٠	٠	٠	0	•	٠	٠	٠	٠	٠	•	٠		0		٠	•
Nabis flavomarginatus Scholtz	0	٠	0	31	31	٠	0	0	0	٠	0	٠	٠	0	٠		0		0	•
Nabis limbatus Dahlbom	0	0	0	31	31	٠	0	0	0	31	0	٠	0		٠		0	٠	31	0
Nabis lineatus Dahlbom		٠	٠	٠	٠	٠	٠	•	٠	٠	٠	٠	٠	•	٠		٠		٠	•
Nabis rugosus (Linnaeus)	0	٠	٠	٠	٠	٠	٠	•	٠	٠	0	٠	٠	•	٠		0		٠	•
Anthocoridae																				
Acompocoris alpinus Reuter		٠	٠	٠	٠	٠	٠	•	٠	٠	٠	٠	٠	•	٠		٠		٠	•
Acompocoris pygmaeus (Fallén)	0	٠	0	٠	٠	٠	٠	•	0			٠	٠		٠		•	0	٠	٠
Anthocoris butleri Le Quesne		٠	٠	٠	٠	٠	٠	•				٠	٠		٠		•	٠	٠	٠
Anthocoris confusus Reuter	0	0	٠	٠	٠	٠	0	0	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	•	•
Anthocoris gallarumulmi (De Geer)	0	٠	٠	٠	٠	٠	٠	•				٠	٠		٠		•	٠	٠	٠
Anthocoris limbatus Fieber		0	٠	٠	٠	٠	٠	•				٠	٠		٠		46	٠	٠	٠
Anthocoris nemoralis (Fabricius)	0	0	٠	٠	•	٠	0	0			0	٠	٠	0	0	٠	0	٠	•	0
Anthocoris nemorum (Linnaeus)	0	0	٠	٠	٠	٠	0	0	0		0	٠	٠	0	0		0	0	٠	•
Anthocoris sarothamni Douglas & Scott		•	•	•	•	•	٠	•	•	•	•	•	٠	•	٠	•	•	•	٠	•
Anthocoris simulans Reuter		٠	٠	٠	٠	٠	٠	•				٠	٠		٠		•	٠	٠	•
Dufouriellus ater (Dufour)		•	•	•	•	•	٠	•	•	•	•	•	٠	•	٠	•	•	22	٠	•
Lyctocoris campestris (Fabricius)	0	•	•	•	•	•	0	•	•	•	•	•	٠	0	٠	•	•	•	0	•
Orius laevigatus (Fieber)		٠	٠	٠	•	٠	٠	•			٠	٠	٠	٠	٠	٠	•	٠	•	
Orius laticollis (Reuter)		٠	٠	٠	٠	٠	٠	•				٠	٠		٠		•	٠	٠	•
Orius majusculus (Reuter)		•	•	•	•	•	٠	•	•	•	•	•	٠	•	٠	•	•	3	٠	•
Orius niger (Wolff) [-]		•	•	٠	•	٠	•					•	•	•	٠	٠		٠	٠	
Temnostethus gracilis Horváth	35	•	•	•	•	•	35	35					٠						35	•
Temnostethus pusillus (Herrich-Schaeffer)		•	•	٠	•	٠	•				35	•	•	•	٠	٠		٠	٠	
Temnostethus tibialis Reuter					٠		•						٠		٠				•	٠
Tetraphleps bicuspis (Herrich-Schaeffer)	0	•	0	٠	•	٠	•					•	•	•	٠	٠		٠	٠	
Xylocoris cursitans (Fallén) [-]		•	•	٠	•	٠	•					•	•	•	٠	٠		٠	٠	
<i>Xylocoris galactinus</i> (Fieber)	0	•	•	٠	•	٠	•					•	•	•	٠	٠		٠	٠	
Cimicidae																				
Cimex lectularius Linnaeus	0	•	•	٠	•	٠	•					•	•	•	٠	٠	0	٠	0	
Cimex pipistrelli Jenyns	•				٠	•	٠	•				•	•	•	•				0	
Oeciacus hirundinis (Lamarck)	•				٠	•	٠	•				•	•	•	•		0		•	
Microphysidae																				
Loricula elegantula (Baerensprung)	0				٠	•	٠	•				•	•	•	•				0	•
Loricula exilis (Fallén)	0	0			٠	•	0	•				•	•	•	•				•	•
Loricula inconspicua (Douglas & Scott)	•				•		•						٠		٠				٠	
Loricula pselaphiformis Curtis			_ •		•													47		

	H1 - South Kerry	H2 - North Kerry	H3 - West Cork	H4 - Mid-Cork	H5 - East Cork	H6 - Waterford	H7 - South Tipperary	H8 - Limerick	H9 - Clare	H10 - North Tipperary	H11 - Kilkenny	H12 - Wexford	H13 - Carlow	H14 - Laois	H15 - South-east Galway	H16 - West Galway	H17 - North-east Galway	H18 - Offaly	H19 - Kildare	H20 - Wicklow
Miridae																				
Acetropis gimmerthalii (Flor)		•	٠	٠	٠	•	٠	٠	•	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠	٠
Adelphocoris lineolatus (Goeze)	0	0	٠	٠															•	
Adelphocoris seticornis (Fabricius)		•	٠	٠	0	0													٠	
Apolygus lucorum (Meyer-Dür)	0	0	٠	•		0			•										•	0
Apolygus spinolae (Meyer-Dür)	14	_	٠	٠	0				48											0
Asciodema obsoleta (Fieber)	0	0	٠	٠	0	0												٠	7	0
Atractotomus magnicornis (Fallén)		0	•	٠	•	0									•			•	•	•
Blepharidopterus angulatus (Fallén)	0	0	0	٠	0	0	0		0											0
Bothynotus pilosus (Boheman)	ļ.,	•	•	٠	•	•	٠		25									٠	•	
Bryocoris pteridis (Fallén)	14	-	30			0			7									•	•	0
Calocoris roseomaculatus (De Geer)	0	0	0	U	U		U		•									٠	•	U
Camptozygum aequale (Villers)		0		•		0												•		
Campyloneura virgula (Herrich-Schaeffer)	0	U	0	•	0	0	U	•	•	•	•	U	•	•	0	U	•	•	/	U
Capsodes flavomarginatus (Donovan) [-]				•					0	•			•	•		•	0	•	•	
Change a chilus av Hanhalii (Fallán)	0 30		0	٠					30									٠	•	0
Charagochilus gyllenhalii (Fallén)	30	U	•	٠	•	U	U	•	30	•	•	•	•	•	U	•	٠	٠	•	U
Chlamydatus pullus (Reuter) [-] Closterotomus fulvomaculatus (De Geer) [-]	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	٠	•	•
Closterotomus norwegicus (Gmelin)	0	0		51				•	7	•			•	•	•			•	0	
Compsidolon salicellum (Herrich-Schaeffer)		_							7											0
Conostethus brevis Reuter	•	50		•						•			•				•			
Conostethus griseus Douglas & Scott [-]																				
Cyllecoris histrionius (Linnaeus)	0	0	0			0	0	0	0			0			0		0			0
Cyrtorhinus caricis (Fallén)		0			0							0								0
Deraeocoris ruber (Linnaeus)	١.																			
Deraeocoris scutellaris (Fabricius)	١.																		25	
Dichrooscytus rufipennis (Fallén)	١.	0																		
Dicyphus constrictus (Boheman)	14																			
Dicyphus epilobii Reuter					0	0	0					0		9					0	0
Dicyphus errans (Wolff)																				
Dicyphus pallicornis (Fieber)	0		0																	0
Dicyphus stachydis J. Sahlberg						0			0								0		0	0
Dryophilocoris flavoquadrimaculatus (De Geer)																				
Fieberocapsus flaveolus (Reuter)																				
Globiceps flavomaculatus (Fabricius)	.	0	0		0	0	0				0				0	0				
Globiceps fulvicollis Jakovlev	.								25											
Grypocoris stysi (Wagner)	0	0																	7	0
Hallodapus rufescens (Burmeister)	.																		•	
Harpocera thoracica (Fallén)																				0
Heterocordylus tibialis (Hahn)																			•	0
Heterotoma planicornis (Pallas)									0											
Leptopterna dolabrata (Linnaeus)																			5	
Leptopterna ferrugata (Fallén)	0	0	٠		0	0	0	٠	٠	•	•	٠	•	٠	0	٠	0	•	•	0

	1																			
	H21 - Dublin	H22 - Meath	H23 - Westmeath	H24 - Longford	H25 - Roscommon	H26 - East Mayo	H27 - West Mayo	H28 - Sligo	H29 - Leitrim	H30 - Cavan	H31 - Louth	H32 - Monaghan	H33 - Fermanagh	H34 - East Donegal	- 1	H36 - Tyrone	H37 - Armagh	H38 - Down	H39 - Antrim	H40 - Londonderry
Miridae																				
Acetropis gimmerthalii (Flor)				46																
Adelphocoris lineolatus (Goeze)	0																			
Adelphocoris seticornis (Fabricius)																				
Apolygus lucorum (Meyer-Dür)	0								0		0									
Apolygus spinolae (Meyer-Dür)	0								0											
Asciodema obsoleta (Fieber)	0							0												
Atractotomus magnicornis (Fallén)	0																			
Blepharidopterus angulatus (Fallén)	0	9	0				0							0			0	0	0	
Bothynotus pilosus (Boheman)																				
Bryocoris pteridis (Fallén)	0							0												
Calocoris roseomaculatus (De Geer)	0		0				0	0			0						0		0	
Camptozygum aequale (Villers)																				
Campyloneura virgula (Herrich-Schaeffer)	0						0				0						0	0		
Capsodes flavomarginatus (Donovan) [-]																				
Capsus ater (Linnaeus)	0						0	0	0		0	1		0			0	0	0	0
Charagochilus gyllenhalii (Fallén)	0		0																	
Chlamydatus pullus (Reuter) [-]																				
Closterotomus fulvomaculatus (De Geer) [-]																				
Closterotomus norwegicus (Gmelin)	0	0	0				0	0	0		0		0	0	0		0	0	0	0
Compsidolon salicellum (Herrich-Schaeffer)	0																			
Conostethus brevis Reuter																		18		
Conostethus griseus Douglas & Scott [-]																				
Cyllecoris histrionius (Linnaeus)	0						0											0	0	
Cyrtorhinus caricis (Fallén)	0	0					0	0			0			0	0		0	0	0	
Deraeocoris ruber (Linnaeus)	0																			
Deraeocoris scutellaris (Fabricius)																				
Dichrooscytus rufipennis (Fallén)	0			•																
Dicyphus constrictus (Boheman)					•															
Dicyphus epilobii Reuter	0	9		•			0				0									
Dicyphus errans (Wolff)	0				•															
Dicyphus pallicornis (Fieber)	0				•															
Dicyphus stachydis J. Sahlberg	0		0		0															
Dryophilocoris flavoquadrimaculatus (De Geer)								•	•	•										22
Fieberocapsus flaveolus (Reuter)	0																	45		
Globiceps flavomaculatus (Fabricius)				•	•	•	•	•	•	•							0		0	
Globiceps fulvicollis Jakovlev		٠			•	٠	٠	•	•	•							٠			
Grypocoris stysi (Wagner)	0	٠	0		•	٠	0	0	0	•							0	0	0	
Hallodapus rufescens (Burmeister)		٠			•	٠	٠	•	•	•							٠			
Harpocera thoracica (Fallén)	0	•	•	•	٠	•	0	•	•	•		•		0			•	0		
Heterocordylus tibialis (Hahn)	•	•	•	•	٠	•	•	•	•	•		•					•			
Heterotoma planicornis (Pallas)	0	٠			•	٠	٠	•	•	•							٠			
Leptopterna dolabrata (Linnaeus)				•	٠			0												
Leptopterna ferrugata (Fallén)	0	٠	0	•	٠	٠	0	0	•	•		٠	0	0	0		0	0	0	0

Minidoo (continued)	H1 - South Kerry	H2 - North Kerry	H3 - West Cork	H4 - Mid-Cork	H5 - East Cork	H6 - Waterford	H7 - South Tipperary	H8 - Limerick	H9 - Clare	H10 - North Tipperary	H11 - Kilkenny	H12 - Wexford	H13 - Carlow	- 1	H15 - South-east Galway	H16 - West Galway	H17 - North-east Galway	H18 - Offaly	H19 - Kildare	H20 - Wicklow
Miridae (continued)	_	^			0	0		^	^		^	^	^				^		0	0
Liocoris tripustulatus (Fabricius)	U	0	•	•	U	U	•	U	U	•	U	U	U	•	•	•	U	•		
Lopus decolor (Fallén)				•						•	•		•	•	•	•				46
Lygocoris pabulinus (Linnaeus)	0	U	0	•														•	U	0
Lygocoris rugicollis (Fallén)	U																	25	•	U
Lygus maritimus Wagner	•	•	•	•					25									23	•	•
Lygus punctatus (Zetterstedt) [-]	1.4	•	•	51															-	•
Lygus rugulipennis Poppius Lygus wagneri Remane																				•
	14	14																		51
Macrolophus pygmaeus (Rambur) [+] Macrolophus rubi Woodroffe		•																		-
Macrotylus paykullii (Fallén)	•	•	30	•	•	0	•													
Malacocoris chlorizans (Panzer)	11		•	•	0	_			30											0
Mecomma ambulans (Fallén)	U	0		0					0											0
Mecomma dispar (Boheman)																				0
Megaloceroea recticornis (Geoffroy)																				
Megalocoleus molliculus (Fallén)		0																		0
Miris striatus (Linnaeus)		0																		
Monalocoris filicis (Linnaeus)	0	0							0											0
Neolygus contaminatus (Fallén)	0	0																	0	0
Neolygus viridis (Fallén)	0	0																		0
Notostira erratica (Linnaeus)					0	46						0								0
Orthocephalus coriaceus (Fabricius)						0														
Orthocephalus saltator (Hahn)	0	0			0	0	0		0		0	0			0				0	0
Orthonotus rufifrons (Fallén)																				
Orthops basalis (A. Costa)																				
Orthops campestris (Linnaeus)	14	14							30											
Orthops kalmii (Linnaeus) [-]																				
Orthotylus adenocarpi (Perris)																				
Orthotylus bilineatus (Fallén)	0																	•		
Orthotylus concolor (Kirschbaum)				•																
Orthotylus ericetorum (Fallén)	14	0				0			30							0			7	0
Orthotylus flavinervis (Kirschbaum)			0			-														
Orthotylus flavosparsus (C.R. Sahlberg)	30		•															•		
Orthotylus marginalis Reuter	0	0	0	•	0	0	0	0	0		0	0	•	•	0		0	•	0	0
Orthotylus nassatus (Fabricius)	0	•		•																
Orthotylus ochrotrichus Fieber	0	0	•	٠															•	0
Orthotylus prasinus (Fallén)	0			٠			•											•		•
Orthotylus tenellus (Fallén)	0	٠	٠	٠		٠	٠											•		٠
Orthotylus virescens (Douglas & Scott)	0																	•		0
Orthotylus viridinervis (Kirschbaum)	٠	0	٠	٠	٠													•		٠
Pachytomella parallela (Meyer-Dür)		٠	٠	٠	٠													•		
Pantilius tunicatus (Fabricius)		-	٠															•		
Phylus coryli (Linnaeus)																		•		
Phylus melanocephalus (Linnaeus)	0	٠	0	٠	•	•	٠	0	•	•	•	•	٠	٠	٠	٠	0		٠	0

Liocoris tripustulatus (Fabricius)		H21 - Dublin	H22 - Meath	H23 - Westmeath	H24 - Longford	- 1	- 1	- 1	- 1	H29 - Leitrim	H30 - Cavan	H31 - Louth	H32 - Monaghan	H33 - Fermanagh	H34 - East Donegal	H35 - West Donegal	H36 - Tyrone	H37 - Armagh	H38 - Down	H39 - Antrim	H40 - Londonderry
Lopus decolor (Fallén Lygocoris pabulinus (Linnaeus)	Miridae (continued)																				
Lygocoris pabulinus (Linnaeus)	*	0	0	0	٠														0	0	٠
Lygocoris rugicollis (Fallén)			٠	•	٠														•	•	•
Lygus maritimus Wagner		0	•																	0	٠
Lygus punctatus (Zetterstedt) [-] Lygus rugulipemis Poppius Lygus wagulipemis Poppius Lygus rugulipemis Po		0	•	•																	٠
Lygus rugulipennis Poppius Lygus wagneri Remane			•	•															_	-	•
Lygus wagneri Remane			•	•																	•
Macrolophus pygmaeus (Rambur) [+] Macrolophus rubi Woodroffe			•	•	•																•
Macrolophus rubi Woodroffe			•	•	•																
Macrorylus paykullii (Fallén) 0 <			•	•	•	-															
Malacocoris chlorizans (Panzer) 0 . <t< td=""><td></td><td></td><td>•</td><td>•</td><td>•</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>			•	•	•																
Mecomma ambulans (Fallén) 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		0	•	•																	
Mecomma dispar (Boheman) 0 0 0 45 51 Megaloccroea recticornis (Geoffroy) 0 45 51 45 51 Megaloccoleus molliculus (Fallén) 0		0	•		•																
Megaloceroea recticornis (Geoffroy)	` /	0	•	U	•	•	•														
Megalocoleus molliculus (Fallén) 0																					
Miris striatus (Linnaeus)		0																_		_	
Monalocoris filicis (Linnaeus)																					
Neolygus contaminatus (Fallén) 0 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 1 1 0 0 0 1 1 0 0 0 0 1 1 0 0 0 0 1 0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>																					
Neolygus viridis (Fallén) 0 0 0 1 Notostira erratica (Linnaeus)		0		0																0	
Notostira erratica (Linnaeus) 0		0						0										-		1	
Orthocephalus coriaceus (Fabricius) 0 0 0 51 Orthocephalus saltator (Hahn) 0 0 0 51 Orthonotus rufifrons (Fallén) 0 25 0 0 Orthops basalis (A. Costa) 25 0 0 Orthops campestris (Linnaeus) 0 0 0 Orthops kalmii (Linnaeus) [-] 0 0 0 Orthotylus adenocarpi (Perris) 0 0 0 Orthotylus bilineatus (Fallén) 0 0 0 Orthotylus cocolor (Kirschbaum) 0 0 0 Orthotylus ericetorum (Fallén) 0 0 0 Orthotylus flavinervis (Kirschbaum) 0 0 0 0 Orthotylus flavosparsus (C.R. Sahlberg) 0 0 0 0 0 Orthotylus marginalis Reuter 0 0 0 0 0 0 Orthotylus prasinus (Fabricius) 0 0 0 0 0 0 Orthotylus prasinus (Fallén) 0 0 0 0 0 0 Orthoty																		-			
Orthocephalus saltator (Hahn) 0 0 51 Orthonotus rufifrons (Fallén) 0 51 51 Orthops basalis (A. Costa) 25 51 51 Orthops campestris (Linnaeus) 57 525 52 52 52 Orthops kalmii (Linnaeus) [-] 51 52 <	` '							0													
Orthonotus rufifrons (Fallén) 0		0						0				0							51		
Orthops basalis (A. Costa) Orthops campestris (Linnaeus) Orthops kalmii (Linnaeus) [-] Orthotylus adenocarpi (Perris) Orthotylus bilineatus (Fallén) Orthotylus concolor (Kirschbaum) Orthotylus ericetorum (Fallén) Orthotylus flavinervis (Kirschbaum) Orthotylus flavosparsus (C.R. Sahlberg) Orthotylus marginalis Reuter Orthotylus nassatus (Fabricius) Orthotylus prasinus (Fallén) Orthotylus prasinus (Fallén) Orthotylus virescens (Douglas & Scott) Orthotylus viridinervis (Kirschbaum) Pachytomella parallela (Meyer-Dür) Pantilius tunicatus (Fabricius) Or orthotylus coryli (Linnaeus)	-	0																			
Orthops campestris (Linnaeus)				25																	
Orthops kalmii (Linnaeus) [-]																					
Orthotylus adenocarpi (Perris) Orthotylus bilineatus (Fallén) Orthotylus concolor (Kirschbaum) Orthotylus ericetorum (Fallén) Orthotylus flavinervis (Kirschbaum) Orthotylus flavosparsus (C.R. Sahlberg) Orthotylus marginalis Reuter Orthotylus nassatus (Fabricius) Orthotylus rochrotrichus Fieber Orthotylus prasinus (Fallén) Orthotylus tenellus (Fallén) Orthotylus virescens (Douglas & Scott) Orthotylus viridinervis (Kirschbaum) Pachytomella parallela (Meyer-Dür) Pantilius tunicatus (Fabricius) Orborthotylus coryli (Linnaeus)																					
Orthotylus concolor (Kirschbaum)										0											
Orthotylus ericetorum (Fallén) 0	Orthotylus bilineatus (Fallén)																		0		
Orthotylus flavinervis (Kirschbaum)	Orthotylus concolor (Kirschbaum)																				
Orthotylus flavosparsus (C.R. Sahlberg) 0	Orthotylus ericetorum (Fallén)		•	0		٠	•		•	•	•	•		•	•		•	•	•	•	
Orthotylus marginalis Reuter 0 · 0 · · · 0 · 0 · 0 · 0 · 0 · 0 · 0 ·			•			•				•		•		•	•					•	•
Orthotylus nassatus (Fabricius)		0	٠	٠	٠	•	•		•	•		•	•						17	•	٠
Orthotylus ochrotrichus Fieber 0		0	٠																	0	٠
Orthotylus prasinus (Fallén)			•																•	•	•
Orthotylus tenellus (Fallén) 0		0	٠	٠															47	•	•
Orthotylus virescens (Douglas & Scott)		•	•	٠		_													•	٠	٠
Orthotylus viridinervis (Kirschbaum)		0	٠	٠															٠	•	٠
Pachytomella parallela (Meyer-Dür) 0 · · · · 51 · · · · · · · · · · · · · ·	, ,	.	٠	•	•															٠	0
Pantilius tunicatus (Fabricius)0 0 · · · · · 0 · · · · · · · · · · · ·		:	٠	•	•															٠	•
Phylus coryli (Linnaeus) 0 · · · · · · 0 · · · · · · · · · · ·		_					_														•
\$ \$																			0	٠	•
	Phylus coryli (Linnaeus) Phylus melanocephalus (Linnaeus)	0																	•	٠	•

	H1 - South Kerry	H2 - North Kerry	H3 - West Cork	H4 - Mid-Cork	H5 - East Cork	H6 - Waterford	H7 - South Tipperary	H8 - Limerick	H9 - Clare	H10 - North Tipperary	H11 - Kilkenny	H12 - Wexford	H13 - Carlow	H14 - Laois	H15 - South-east Galway	H16 - West Galway	H17 - North-east Galway	H18 - Offaly	- 1	H20 - Wicklow
Miridae (continued)																				
Phytocoris dimidiatus Kirschbaum	0	0																		
Phytocoris longipennis Flor		0			0	0	0								0		0	•	0	0
Phytocoris populi (Linnaeus)		0																	0	0
Phytocoris reuteri Saunders		٠	٠	٠	•	•		•									٠	•	•	
Phytocoris tiliae (Fabricius)		0	0	•	0	•											0	٠	0	0
Phytocoris ulmi (Linnaeus)	٠	0		٠	•	0	0	•	0											•
Phytocoris varipes Boheman	0	0	0	٠	0	0	•	•	30	•	0	0	•	•		•	•	٠	•	0
Pinalitus atomarius (Meyer-Dür)		٠		٠	٠	٠	٠	•	٠	٠	•	٠	•	٠	٠	٠	٠	•	٠	0
Pinalitus cervinus (Herrich-Schaeffer)	0	0	0	٠	0	0	٠	٠	7	•	٠	0	٠	٠	0	٠	0	٠	٠	0
Pinalitus rubricatus (Fallén)		٠	•	•	•	0	•	•	•	•	•	•	•	٠	•	•	0	٠	•	0
Pithanus maerkelii (Herrich-Schaeffer)	0	0	-	54	-	0	0	0	0	0	0	0	•	•	0	0	0	٠	0	0
Plagiognathus arbustorum (Fabricius)	0	0		54		0		0		•	0		•	9	•	٠	0	٠	0	0
Plagiognathus chrysanthemi (Wolff)	0	0	0	٠	0	0	0	0	0	•	0	0	•	•	0	٠	0	٠	0	0
Platycranus bicolor (Douglas & Scott)		•	•	•	٠	٠	•	•	•	•	•	•	•	٠	•	•	٠	•	•	•
Plesiodema pinetella (Zetterstedt)		٠	٠	•	•	•	•	•	•	•	•	•	•	٠	•	•	٠	•		•
Polymerus nigrita (Fallén)			٠	•				•			•		•	٠	•	•	٠	•	3	
Polymerus palustris (Reuter)		U	•	•	U	U	0	U	U	U	•	U	•	•	•	•	•	•	•	0
Polymerus unifasciatus (Fabricius) [-]		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
Psallodema fieberi (Fieber)	0			•			•			•	•		•	•	•	•		•	•	
Psallus ambiguus (Fallén)	0	0	0	•	0	0	•	0	0	٠	•	U	•	•	•	•	0	•	•	0
Psallus betuleti (Fallén) [-]		•	•	•	٠	•	•	•	•	•	•	•	•	•	•	23	•	•	•	
Psallus confusus Rieger Psallus falleni Reuter	14	0	•	•	•	0			•	•	•	0	•	•	•	23		•	7	0
Psallus flavellus Stichel	14				•			•		•	•		•	•				•		0
Psallus haematodes (Gmelin)	0	0			•	•		•		•	•	0	•	•	0	0	0	•		
Psallus lepidus Fieber	0	0			0	0											0			
Psallus mollis (Mulsant & Rey) [-]																				
Psallus perrisi (Mulsant & Rey)																				3
Psallus quercus (Kirschbaum) [-]																				
Psallus salicis (Kirschbaum)	0	14																		
Psallus variabilis (Fallén) [-]		•																		
Psallus varians (Herrich-Schaeffer)	0	0	0		0	0	0	0	0			0				0				0
Psallus wagneri Ossiannilsson																				
Rhabdomiris striatellus (Fabricius)	0	0	0			0											0			0
Stenodema calcarata (Fallén)	0	0	0		0	0	0	0	30		0	0			0	0			0	0
Stenodema holsata (Fabricius)	14						0									0			0	0
Stenodema laevigata (Linnaeus)	0					0			30			0			0	0	0		0	0
Stenotus binotatus (Fabricius)	0						0												7	~
Teratocoris saundersi Douglas & Scott	0	0			0	0	0			0	0	0								0
Teratocoris viridis Douglas & Scott [+]															0					
Trigonotylus ruficornis (Geoffroy)	.																			
Tytthus pubescens (Knight)	•				•															
Tytthus pygmaeus (Zetterstedt)		•		54	•	54		•	•	•	•	0	•	•		•	٠	•		

	1																			
	H21 - Dublin	H22 - Meath	H23 - Westmeath	H24 - Longford	H25 - Roscommon	- 1	H27 - West Mayo	1	H29 - Leitrim	H30 - Cavan	H31 - Louth	H32 - Monaghan	H33 - Fermanagh	1	- 1	- 1	H37 - Armagh	H38 - Down	- 1	H40 - Londonderry
Miridae (continued)																				
Phytocoris dimidiatus Kirschbaum		•	٠	٠	٠	•	•	٠	٠	•	•	٠	٠	٠	•	•	•	•	•	٠
Phytocoris longipennis Flor	0	0						•									-	•	•	•
Phytocoris populi (Linnaeus)	0	•	٠	٠		•	•	•	•	•	•		•	0	•		•	•	0	•
Phytocoris reuteri Saunders		٠	٠	٠		•	•	٠	٠	٠	•		•	٠	•	•	47	•	•	٠
Phytocoris tiliae (Fabricius)	0	0	٠	٠		•	•	•	٠							•	0	•	•	٠
Phytocoris ulmi (Linnaeus)	0	•	•	•	•	•	•	٠	•							•	0		•	•
Phytocoris varipes Boheman	0	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•
Pinalitus atomarius (Meyer-Dür)	0	•	•	•	•	•	•	٠	•	•	•	•	•	•	•	•	•	•	•	•
Pinalitus cervinus (Herrich-Schaeffer)	0	0	0	٠			0	0	•		0		•	0			0	•	•	
Pinalitus rubricatus (Fallén)	0	•	•	•		•	•	•	•	•	•		•		•	•		•	•	
Pithanus maerkelii (Herrich-Schaeffer)	0	54	0	•			0				0			0			0		•	٠
Plagiognathus arbustorum (Fabricius)	0	54	0	•				0											0	
Plagiognathus chrysanthemi (Wolff)	0		0	٠				0										0	0	0
Platycranus bicolor (Douglas & Scott)		•	•	•			•	•	•		•		•	•	•		•	47	•	٠
Plesiodema pinetella (Zetterstedt)		•	•	•			•	•	•		•		•	•	•		•	22	•	٠
Polymerus nigrita (Fallén)			•	•			•		•		•		•		•			•	•	
Polymerus palustris (Reuter)	0		•	•			0		0		•		•		•			0	•	
Polymerus unifasciatus (Fabricius) [-]		•	•	•			•	•	•		•		•	•	•		•	•	•	٠
Psallodema fieberi (Fieber)			•	•			•		•		•		•		•			•	•	
Psallus ambiguus (Fallén)	0		•	•			0	0	0		•		•		0			•	0	
Psallus betuleti (Fallén) [-]		•	•	•			•	•	•		•		•	•	•		•	•	•	٠
Psallus confusus Rieger		•	•	•			•	•	•		•		•	•	•		•	•	•	٠
Psallus falleni Reuter	0		0	٠			0	٠	•		•		•				0	•	•	
Psallus flavellus Stichel			•	•			•		•		•		•		•		22	•	•	
Psallus haematodes (Gmelin)	0		0	•			0		•		0		•	0	•		0	•	0	0
Psallus lepidus Fieber	0		•	•			0		•		•		•		0			•	•	
Psallus mollis (Mulsant & Rey) [-]			•	٠				٠	•		•		•					•	•	
Psallus perrisi (Mulsant & Rey)		•	•	•			•	•	•		•		•	•	•		•	•	•	٠
Psallus quercus (Kirschbaum) [-]			•	•			•		•		•		•		•			•	•	
Psallus salicis (Kirschbaum)	0	•	•	•			•	•	•		•		•	•	•		•	•	•	٠
Psallus variabilis (Fallén) [-]			•	٠				•	•				•						•	٠
Psallus varians (Herrich-Schaeffer)	0		0	•			0	0	0		•		•	0	•		0	•	•	
Psallus wagneri Ossiannilsson		•	•	•			•	•	•		•		•	•	•		•	•	22	٠
Rhabdomiris striatellus (Fabricius)	0		•	•			0		•		•		•	0	•		0	•	0	
Stenodema calcarata (Fallén)	0	54	0	•				0			0						0	•	•	
Stenodema holsata (Fabricius)	0		0	٠				0					_				-		-	•
Stenodema laevigata (Linnaeus)	0	0	0	•				0			0									
Stenotus binotatus (Fabricius)	0		0					0									0			
Teratocoris saundersi Douglas & Scott	0	0	٠	•			0	0			0								0	
Teratocoris viridis Douglas & Scott [+]			•	٠		•	•	0	0		•		•	0	•	٠		•	•	•
Trigonotylus ruficornis (Geoffroy)		٠	٠	•				•	•											
Tytthus pubescens (Knight)			•	٠		•	•	•	•		•		•	•	•	٠		25	•	•
Tytthus pygmaeus (Zetterstedt)	0																			

	South Kerry	North Kerry	West Cork	Mid-Cork	East Cork	Waterford	South Tipperary	Limerick	Clare	- North Tipperary	- Kilkenny	- Wexford	- Carlow	- Laois	- South-east Galway	- West Galway	- North-east Galway	- Offaly	- Kildare	- Wicklow
	1	2 -	3	- 1	5 -	- 9	- /	× ×	- 1	H10.	H111.	H12.	H13.	H14.	H15.	H16.	H17.	H18.	H19.	20
	H	H2	H3	H4	H5	9H	H7	H8	H	H	H	Η	Η	Η	Η	Η	H	Η	Η	H
Ceratocombidae																				
Ceratocombus coleoptratus (Zetterstedt)		0																		
Dipsocoridae																				
Ĉryptostemma alienum Herrich-Schaeffer	14	0																		0
Pachycoleus waltli Fieber	14	0																	•	
Saldidae																				
Chartoscirta cincta (Herrich-Schaeffer)	0				0				48			0	0			0			0	0
Chartoscirta elegantula (Fallén)		0										0								
Chiloxanthus pilosus (Fallén)																			•	
Halosalda lateralis (Fallén)						0														0
Macrosaldula scotica (Curtis)	0	0	0			0		0	0											0
Salda littoralis (Linnaeus)	0	0	0			0		0	0			0			0	0			•	0
Salda morio Zetterstedt									23							23				
Salda muelleri (Gmelin) [-]																				
Saldula connemarae Walton																15			•	
Saldula opacula (Zetterstedt)			4																•	
Saldula orthochila (Fieber)										54		28				0			0	0
Saldula palustris (Douglas)	30		4																•	
Saldula pilosella (Thomson)						0														
Saldula saltatoria (Linnaeus)	0	0	0	54	0	0			48		54	0	0			0				0
Aepophilidae																				
Aepophilus bonnairei Signoret			0			0									0					
Mesoveliidae																				
Mesovelia furcata Mulsant & Rey	25																		•	
Hebridae																				
Hebrus ruficeps Thomson		0							0					0					•	0
Hydrometridae																				
Hydrometra gracilenta Horváth			43																	
Hydrometra stagnorum (Linnaeus)	0	0	0		•	0		0	26			0			0					0
Veliidae																				
Microvelia pygmaea (Dufour)									45										•	•
Microvelia reticulata (Burmeister)																				
Velia caprai Tamanini	12	14	30		•	•		•	48			•	•		•		•		•	•
Velia saulii Tamanini	14	14			•	•		•	•			•	•		•		•		•	19
Gerridae																				
Aquarius najas (De Geer)																				
Gerris argentatus Schummel																		•		
Gerris costae (Herrich-Schaeffer)																		•		
Gerris lacustris (Linnaeus)	0	0	0																	
Gerris lateralis Schummel																				
Gerris odontogaster (Zetterstedt)	0	0	29						26						0					0
Gerris thoracicus Schummel																				
Limnoporus rufoscutellatus (Latreille)		0			_•				26									46		

	1																			
	H21 - Dublin	H22 - Meath	H23 - Westmeath	H24 - Longford	H25 - Roscommon	H26 - East Mayo	H27 - West Mayo	H28 - Sligo	H29 - Leitrim	H30 - Cavan	H31 - Louth	H32 - Monaghan	H33 - Fermanagh	H34 - East Donegal	H35 - West Donegal	H36 - Tyrone	H37 - Armagh	H38 - Down	H39 - Antrim	H40 - Londonderry
Ceratocombidae																				
Ceratocombus coleoptratus (Zetterstedt)		•	•	•		•	•		•			•	•	•		•	•	•	•	
Dipsocoridae																				
Cryptostemma alienum Herrich-Schaeffer	0																		0	
Pachycoleus waltli Fieber																	51			
Saldidae																				
Chartoscirta cincta (Herrich-Schaeffer)	0	0			0		0		0		0			0			0		0	
Chartoscirta elegantula (Fallén)																				
Chiloxanthus pilosus (Fallén)	0																			
Halosalda lateralis (Fallén)	0																			
Macrosaldula scotica (Curtis)	0						0	0										0		
Salda littoralis (Linnaeus)	0		0				0	0	0					0			0	0	0	
Salda morio Zetterstedt					23			23												
Salda muelleri (Gmelin) [-]	١.																			
Saldula connemarae Walton	١.																			
Saldula opacula (Zetterstedt)	4														4		4			
Saldula orthochila (Fieber)	0	0	0				0										ò			
Saldula palustris (Douglas)																				
Saldula pilosella (Thomson)																				
Saldula saltatoria (Linnaeus)	0		0		·	Ī	0	0	0		·		Ī	0	0		0	0	0	Ť
Aepophilidae	0	•	U	•	•	•	U	U	U	•	•	•	•	U	U	•	U	U	U	•
Aepophilus bonnairei Signoret	0						Λ													
Mesoveliidae	U	•	•	•	•	•	U	•	•	•	•	•	•	•	•	•	•	•	•	•
Mesovelia furcata Mulsant & Rey		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Hebridae												0	22				<i>-</i> 1	22		
Hebrus ruficeps Thomson	0	•	•	•	•	•	•	•	•	•	•	U	32	•	•	•	31	32	•	•
Hydrometridae																				
Hydrometra gracilenta Horváth		•	•	•	•	•		•	•	•	•	•	•	•	•	•		•	•	
Hydrometra stagnorum (Linnaeus)	0	•	•	•	•	•	O	•	•	•	•	•	32	•	Ü	32	U	1	1	32
Veliidae																				
Microvelia pygmaea (Dufour)		•	•	•	•	•														
Microvelia reticulata (Burmeister)								0												
Velia caprai Tamanini								55												
Velia saulii Tamanini	•	•	37	٠	٠	٠	٠		٠	•	٠	٠	٠	٠	٠	٠	19	٠	٠	٠
Gerridae																				
Aquarius najas (De Geer)		٠	•																	
Gerris argentatus Schummel	0																			
Gerris costae (Herrich-Schaeffer)	0							0												
Gerris lacustris (Linnaeus)	0							0												
Gerris lateralis Schummel	37		•	•		•						•	32	•		32	32	32		
Gerris odontogaster (Zetterstedt)	0							0												
Gerris thoracicus Schummel							0						32	0	0		32	32	0	32
Limnoporus rufoscutellatus (Latreille)					46								19		43	19	19		32	

	H1 - South Kerry	H2 - North Kerry	H3 - West Cork	H4 - Mid-Cork	H5 - East Cork	H6 - Waterford	H7 - South Tipperary	H8 - Limerick	H9 - Clare	H10 - North Tipperary	H11 - Kilkenny	H12 - Wexford	H13 - Carlow	H14 - Laois	H15 - South-east Galway	H16 - West Galway	H17 - North-east Galway	H18 - Offaly	H19 - Kildare	H20 - Wicklow
Nepidae							_													
Nepa cinerea Linnaeus	0	0	0	0	٠	•	2	0	O	٠	0	•	•	•	•	0	0	•	•	0
Aphelocheiridae																				
Aphelocheirus aestivalis (Fabricius)		•	٠	•	•	•	O	•	11	•	•	•	٠	0	•	٠	•	•	0	•
Notonectidae		_	_	_	_		_	_	40		_	_		_	_	_	_			^
Notonecta glauca Linnaeus	0	0	2	0	0	•	2	2	48	•	2	0	٠	0	2	O	2	•	٠	0
Notonecta maculata Fabricius			•	•	٠	٠	٠	٠		٠	٠	•	٠	٠	٠		•	٠	٠	•
Notonecta obliqua Thunberg	0	0	2	•		•	•	•	48	•	•	-	•	•	٠	U	•	•	•	Ü
Notonecta viridis Delcourt		2	29	•	•	•	•	•	•	•	•	0	٠	٠	•	•	•	•	•	٠
Pleidae	1.0	_	20	_	_	_						_				_				^
Plea minutissima Leach	12	Ü	29	Ü	0	2	•	•	•	•	•	0	•	•	•	0	•	•	•	0
Corixidae																				2/
Arctocorisa carinata (C.R. Sahlberg)			•	•	•	•	•	•				•				55	•	•	•	25
Arctocorisa germari (Fieber)	$\frac{2}{2}$	0	•	•	•	•	•		48					•	0	2		•	•	
Callicorixa praeusta (Fieber)	2	0	2	•	•	•	•	•	48	2	•	•	•	•	2	0	U	•	•	0
Callicorixa wollastoni (Douglas & Scott)	2	0		•	•	•	•	•		•	•	•	•	•		2	•	•	•	U
Corixa affinis Leach	2	0	29	•	•	•	•	•	48	•	•	•	•	•	0	2	•	•	•	•
Corixa dentipes Thomson Corixa iberica Jansson	•	U	2	•	•	•	•	•	•	•	•	•	•	•	•	2	•	•	•	•
	12		20	•	•	•	•	•	10	•	•		•	•	•		•	•	•	•
Corixa panzeri Fieber		-	29 2	•		•	•		48							0	•	•	•	
Corixa punctata (Illiger)	2	-	2	•	0	2			48 48							0	•	•		0
Characania mania (C.R. Sahlberg)	0 14	-	33	•	•	_			⁴⁰								•	•	0	· 21
Glaenocorisa propinqua (Fieber) Hesperocorixa castanea (Thomson)	1	0	2	•	•				48								•	•	٠	33
	0		2	•					48									•	•	0
Hesperocorixa linnaei (Fieber)	0	0	2	•	U	•	•		48									•	•	U
Hesperocorixa moesta (Fieber) Hesperocorixa sahlbergi (Fieber)	0	0	2	•	0	•	2		48									•	•	
Micronecta griseola Horváth	U	U	2	•		٠			26									•	٠	U
Micronecta griseota Horvatti Micronecta poweri (Douglas & Scott)	2	0	•	•															•	•
Paracorixa concinna (Fieber)			2																	
Sigara distincta (Fieber)	2																			
Sigara dorsalis (Leach)			2																	
Sigara falleni (Fieber)																				
Sigara fallenoidea (Hungerford)									48											
Sigara fossarum (Leach)	١.	0																0		0
Sigara lateralis (Leach)	2	-			0															
Sigara limitata (Fieber)	-	0							•											
Sigara nigrolineata (Fieber)	2	-	29																	0
Sigara scotti (Douglas & Scott)		-	2																	
Sigara selecta (Fieber)	12								•											
Sigara semistriata (Fieber)	1	0	2																	n
Sigara stagnalis (Leach)																				
2.00. d brognotts (Leach)	9																			

	H21 - Dublin	H22 - Meath	- 1	H24 - Longford	H25 - Roscommon	H26 - East Mayo	H27 - West Mayo	H28 - Sligo	H29 - Leitrim	H30 - Cavan	H31 - Louth	H32 - Monaghan	H33 - Fermanagh	H34 - East Donegal	H35 - West Donegal	H36 - Tyrone	H37 - Armagh	H38 - Down	H39 - Antrim	H40 - Londonderry
Nepidae																				
Nepa cinerea Linnaeus	0	•	•	•	•	•	0	0	0	0	٠	٠	32	0	0	32	0	1	1	٠
Aphelocheiridae																				
Aphelocheirus aestivalis (Fabricius)	0	5	•	٠	٠	6	٠	٠			٠	٠	٠	٠	٠	•	0	٠	0	٠
Notonectidae																				
Notonecta glauca Linnaeus	0	•	0	٠	٠	٠	0	0	0	0	•	•	2	0	55	32	0	32	0	32
Notonecta maculata Fabricius		•	•	٠	٠	٠	٠	٠		2	•	•	٠	٠	٠	•	٠	٠	٠	٠
Notonecta obliqua Thunberg	0	•	•	٠	٠	٠	0	٠	•	•	•	•	32	0	0	32	٠	0	32	32
Notonecta viridis Delcourt		•	٠	٠	٠	٠	•	٠	•	•	٠	٠	٠	٠	•	•	٠	٠	•	٠
Pleidae																				
Plea minutissima Leach		•	•	٠	٠	٠	٠	0			•	•	٠	٠	٠	•	٠	0	٠	0
Corixidae																				
Arctocorisa carinata (C.R. Sahlberg)		•	٠	٠	٠	٠		37					٠				٠	٠	•	٠
Arctocorisa germari (Fieber)	0	•	•	٠	٠	2	0						32						0	
Callicorixa praeusta (Fieber)	0	•	0	٠	2	٠	٠	2											0	
Callicorixa wollastoni (Douglas & Scott)		•	٠	٠	٠	٠													32	0
Corixa affinis Leach	0	•	0	٠	٠			•											٠	0
Corixa dentipes Thomson	0	•	٠	٠	٠														0	
Corixa iberica Jansson		•	•	٠	٠	٠	٠	٠			•	•	٠	٠					32	
Corixa panzeri Fieber	0	•	•	٠	٠	٠	٠	-					٠					-	٠	32
Corixa punctata (Illiger)	0	•	•	٠	0	٠	0						2						_	0
Cymatia bonsdorffii (C.R. Sahlberg)	0	•	0	٠	2	2	0	0	•	•	•	•	2	33	2	32	0	0	0	٠
Glaenocorisa propinqua (Fieber)		•	•	٠	٠	٠	٠	٠								_		-	32	
Hesperocorixa castanea (Thomson)		•	•	•	•	•	0	٠	•	•	•								0	
Hesperocorixa linnaei (Fieber)	0	•	•	٠	٠	2	٠	0			٠								0	0
Hesperocorixa moesta (Fieber)	0	•		٠	•	•	•	٠	•	•	٠		•					32		0
Hesperocorixa sahlbergi (Fieber)	0	•		٠	•	•	0	٠	•	0	٠	٠	32	0	0	32	0	0	0	0
Micronecta griseola Horváth		•	•	•	•	•	٠	٠	•	•	•		٠					•	•	•
Micronecta poweri (Douglas & Scott)	0	•	•	٠	٠	٠	٠	0											0	
Paracorixa concinna (Fieber)		•	•	•	•	•	٠	٠	•										0	
Sigara distincta (Fieber)	0	•	0																0	
Sigara dorsalis (Leach)	0		0																0	
Sigara falleni (Fieber)	0	0	0	٠															0	
Sigara fallenoidea (Hungerford)		•	•	٠	2														32	
Sigara fossarum (Leach)	0	٠	0	٠	٠														0	
Sigara lateralis (Leach)	0	•	•	•															32	
Sigara limitata (Fieber)	•	٠	•	٠																
Sigara nigrolineata (Fieber)	0	•	0	•	•														32	
Sigara scotti (Douglas & Scott)	•	•	•	•	•	٠	2	•	•	•	٠	٠	32	0	0	32	2	0	0	
Sigara selecta (Fieber)	•	•	•	٠	•	٠	٠	•	•	•	٠	٠	•	•	٠	•	•	٠	•	
Sigara semistriata (Fieber)	0		•	٠	0														1	
Sigara stagnalis (Leach)	0	٠	٠	٠	٠														•	
Sigara venusta (Douglas & Scott)		•	•	•	•	•	•	٠	•	•	٠	٠	•	0	0	•	0	0	٠	0

Table 2. The references relating to the numbers in Table 1.

0	Halbert (1935)	28	Fritch, McCormack & Nelson (2010)
1	Crawford (1935)	29	Barry (2013)
2	Leston (1958)	30	Kirby (1991)
3	Stelfox (1965)	31	Roth & O'Connor (1993)
4	Walton (1966)	32	Nelson (1995)
5	MacNeill (1968)	33	McCarthy (1975)
6	Wilkins (1968)	34	O'Connor & Ashe (1996)
7	MacNeill (1969a)	35	O'Connor (1989)
8	MacNeill (1969b)	36	Britten (1939)
9	MacNeill (1970)	37	O'Connor & Nelson (2012)
10	Nash (1974)	38	O'Connor, O'Connor & Williams (1988)
11	O'Connor & O'Connor (1979)	39	Woodroffe (1962)
12	McCarthy & Walton (1980)	40	Anderson (2006)
13	Walton (1981)	41	O'Connor & O'Connor (1993)
14	Kirby (1983)	42	Alexander & Foster (1993)
15	Walton (1986)	43	Nelson (1999)
16	Judd (1986)	44	Bowdrey (2007)
17	Nelson (1986)	45	Nelson (2013)
18	Nelson (1988)	46	Nelson (2014)
19	Nelson (1997a)	47	Massee (1958)
20	Nelson (1997b)	48	Lansbury (1964)
21	Nelson & Smiddy (1997)	49	Morris (1967)
22	Alexander & Foster (1999)	50	Nelson (2015)
23	Aukema & Aukema (2001)	51	Nelson, Hermes & Aukema (2015)
24	Neale, Nelson & Rippey (2003)	52	Foley & McCormack (2013)
25	Aukema et al. (2006)	53	Cawley & Nelson (2013)
26	Cuppen & Nelson (2007)	54	Helden, Anderson & Purvis (2008)
27	Stelfox (1938)	55	McCormack, Nolan & Regan (2006)

THE DIVISION OF RYAN'S LIST OF HEMIPTERA-HETEROPTERA FOR HAMPSHIRE INTO VICE-COUNTY LISTS FOR VC10, VC11 AND VC12

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Introduction

The list of Hemiptera-Heteroptera for Hampshire in Ryan (2014) was compiled from that of Massee (1955) with additional records from the national entomological literature published in the six decades between these two papers. Ryan did not consider earlier publications, in particular Jones (1928-1930), and the modern work of Dr David Biggs; and did not attempt to divide the list for Hampshire into separate lists for its constituent vice-counties, which are the basis of modern recording. The present paper addresses these shortcomings, adding new county records and dividing the county list into separate lists for the Isle of Wight (VC10), Watsonian South Hampshire (VC11) and Watsonian North Hampshire (VC12).

The vice-county records were interpreted by taking into account the name changes and confusions over identity documented in Ryan (2012a, 2013, 2014, 2015a, 2016a & 2016b). The resulting vice-county lists include 686 records, compared with 437 for the original Hampshire list. The list for Hampshire as a whole has shortened by 24, the decrease arising from eleven species added to the list and 35 deleted from it due to the known records being insufficiently precise to be allocated to a particular vice-county.

The lists for the three vice-counties, which will appear in the next edition of the county distribution, are presented below. The species that are new to Ryan's list for Hampshire are marked "[NEW]", and the deleted species are marked "[DELETED]". The numbers in brackets marking some of the records relate to the references from which they were derived, as indicated in Table 1. The unmarked records are from Jones (1928-1930). Details of the records marked "A" are given in the Appendix, these having not previously been published. I am grateful to Dr. Biggs for allowing me to publish these records in this paper, and for his assistance with the Isle of Wight list.

The divided records

ADADIDAD

Α	RADIDAE			
	Aneurus avenius (Dufour)	VC10 (48)	-	VC12
	Aneurus laevis (Fabricius)	VC10 (51)	-	-
	Aradus cinnamomeus Panzer	_	VC11 (57)	VC12 (56)
	Aradus corticalis (Linnaeus)	-	VC11	-
	Aradus depressus (Fabricius)	VC10	VC11	
A	CANTHOSOMATIDAE			
	Acanthosoma haemorrhoidale (Linnaeus)	VC10 (45)	VC11	-
	Cyphostethus tristriatus (Fabricius)	VC10 (45)	VC11 (23)	-
	Elasmostethus interstinctus (Linnaeus)	VC10	VC11	-
	Elasmucha grisea (Linnaeus)	VC10	VC11	-
C	YDNIDAE			
	Adomerus biguttatus (Linnaeus)	VC10	VC11	VC12 (5)
	Byrsinus flavicornis (Fabricius)	VC10	_	-
	Canthophorus impressus (Horváth)	VC10	-	-
	Legnotus limbosus (Geoffroy)	VC10	-	-
	Legnotus picipes (Fallén)	VC10	-	-
	Sehirus luctuosus Mulsant & Rey	VC10	VC11	-
	Tritomegas bicolor (Linnaeus)	VC10	VC11	-

THYREOCORIDAE			
Thyreocoris scarabaeoides (Linnaeus)	VC10	VC11	_
·			
SCUTELLERIDAE			
Eurygaster maura (Linnaeus) [DELETED]	-	-	-
Eurygaster testudinaria (Geoffroy)	VC10 (45)	-	-
Odontoscelis fuliginosa (Linnaeus)	VC10	-	-
Odontoscelis lineola Rambur	VC10	-	VC12 (15)
PENTATOMIDAE			
Aelia acuminata (Linnaeus)	VC10	VC11 (28)	VC12
Chlorochroa juniperina (Linnaeus) [DELETED]	-	-	-
Dolycoris baccarum (Linnaeus)	VC10	VC11	_
Eurydema dominulus (Scopoli)	-	-	VC12
Eurydema oleracea (Linnaeus)	VC10	VC11 (23)	_
Eurydema ornata (Linnaeus)	VC10 (34)	-	-
Eysarcoris aeneus (Scopoli)	VC10	VC11	-
Eysarcoris venustissimus (Schrank)	VC10 (45)	VC11	VC12
Neottiglossa pusilla (Gmelin)	VC10	VC11	-
Nezara viridula (Linnaeus)	-	VC11 (30)	-
Palomena prasina (Linnaeus)	VC10	VC11	-
Pentatoma rufipes (Linnaeus)	VC10 (53)	-	-
Peribalus strictus (Fabricius)		VC11 (27)	-
Picromerus bidens (Linnaeus)	VC10 (49)	VC11	-
Piezodorus lituratus (Fabricius)	VC10 (53)	-	-
Podops inunctus (Fabricius)	VC10	VC11	-
Rhacognathus punctatus (Linnaeus)	-	VC11	-
Sciocoris cursitans (Fabricius)	VC10	-	-
Troilus luridus (Fabricius)	VC10 (45)	- VC11	-
Zicrona caerulea (Linnaeus)	VC10	VC11	-
Coreidae			
Bathysolen nubilus (Fallén)	-	-	VC12 (27)
Ceraleptus lividus Stein	-	VC11 (19)	-
Coreus marginatus (Linnaeus)	VC10	VC11	-
Coriomeris denticulatus (Scopoli)	VC10	VC11	-
Enoplops scapha (Fabricius)	VC10	-	-
Gonocerus acuteangulatus (Goeze)	VC10 (48)	VC11 (33)	VC12 (38)
Leptoglossus occidentalis Heidemann	VC10 (50)	VC11 (29)	-
Spathocera dalmanii (Schilling)	-	VC11 (18)	VC12 (16)
Syromastus rhombeus (Linnaeus)	VC10	VC11	-
ALYDIDAE			
Alydus calcaratus (Linnaeus)	VC10	VC11	-
.,			
RHOPALIDAE			
Chorosoma schillingii (Schilling)	VC10	-	-
Corizus hyoscyami (Linnaeus)	VC10	-	VC12 (58)
Liorhyssus hyalinus (Fabricius)	VC10 (48)	- VC11	VC12 (15)
Myrmus miriformis (Fallén)	VC10	VC11	- VC12 (16)
Rhopalus maculatus (Fieber)	-	VC11 VC11	VC12 (16)
Rhopalus parumpunctatus Schilling Rhopalus rufus Schilling	-	VCII	VC12 (15) VC12
Rhopalus subrufus (Gmelin)	VC10 (45)	- VC11	VC12 VC12
Stictopleurus abutilon (Rossi)	VC10 (43) VC10 (51)	VC11 (32)	VC12 (15)
(2000)	. 515 (51)	(52)	(10)

Divonation of (Continuing)			
RHOPALIDAE (CONTINUED) Stinton Lourne municipal (Congo)		VC11 (20)	
Stictopleurus punctatonervosus (Goeze)	-	VC11 (38)	-
STENOCEPHALIDAE			
Dicranocephalus agilis (Scopoli)	VC10	_	_
Dicranocephalus albipes (Fabricius)	-	VC11	_
Dicranocephalus medius (Mulsant & Rey)	VC10 (51)	-	_
Dietemberephanis meanis (Maisant & Tes)	(81)		
Lygaeidae			
Acompus rufipes (Wolff)	-	VC11	-
Aphanus rolandri (Linnaeus)	-	VC11 (26)	-
Beosus maritimus (Scopoli)	VC10 (65)	-	-
Chilacis typhae (Perris)	VC10 (45)	-	-
Cymus claviculus (Fallén)	VC10	VC11	-
Cymus glandicolor Hahn	VC10	VC11	-
Cymus melanocephalus Fieber	VC10 (12)	VC11	-
Drymus brunneus (R.F. Sahlberg) [DELETED]	-	-	-
Drymus latus Douglas & Scott	VC10 (19)	VC11 (26)	-
Drymus pilipes Fieber	-	-	VC12 (17)
Drymus pumilio Puton [DELETED]	-	-	-
Drymus ryeii Douglas & Scott [DELETED]	-	-	-
Drymus sylvaticus (Fabricius)	VC10	-	-
Emblethis denticollis Horváth	-	-	VC12 (15)
Eremocoris plebejus (Fallén) [DELETED]	-	-	-
Eremocoris podagricus (Fabricius) [DELETED]	-	-	-
Gastrodes abietum Bergroth	-	VC11	-
Gastrodes grossipes (De Geer)	VC10 (49)	-	-
Graptopeltus lynceus (Fabricius)	VC10	VC11	VC12 (15)
Henestaris laticeps (Curtis)	VC10	VC11	-
Heterogaster artemisiae Schilling	VC10 (47)		VC12 (17)
Heterogaster urticae (Fabricius)	VC10	VC11	-
Ischnocoris angustulus (Boheman) [DELETED]	-	-	-
Ischnodemus sabuleti (Fallén)	VC10 (46)	_	-
Kleidocerys ericae (Horváth)	VC10	VC11	-
Kleidocerys resedae (Panzer)	VC10	VC11	-
Lamproplax picea (Flor)	-	VC11	VC12 (5)
Lasiosomus enervis (Herrich-Schaeffer)	VC10	VC11	-
Macrodema microptera (Curtis)	VC10 (53)	VC11	-
Megalonotus antennatus (Schilling)	VC10	-	VC12 (38)
Megalonotus dilatatus (Herrich-Schaeffer)	VC10	VC11	-
Megalonotus praetextatus (Herrich-Schaeffer)	-	VC11 (38)	VC12 (15)
Megalonotus sabulicola (Thomson) [NEW]	VC10 (64)	-	-
Metopoplax ditomoides (A. Costa)	-	-	VC12 (15)
Notochilus limbatus Fieber	- 11010 (45)	VC11	-
Nysius ericae (Schilling)	VC10 (45)	- V(C11 (OC)	VC12 (15)
Nysius graminicola (Kolenati)	-	VC11 (26)	-
Nysius helveticus (Herrich-Schaeffer)	-	VC11	VC12 (18)
Nysius senecionis (Schilling)	-	VC11 (26)	VC12 (15)
Nysius thymi (Wolff)	-	VC11 (39)	VC12 (15)
Orsillus depressus (Mulsant & Rey)	-	VC11 (23)	- VC12 (10)
Pachybrachius fracticollis (Schilling)	-	VC11	VC12 (18)
Pachybrachius luridus Hahn	- VC10	VC11	-
Peritrechus convivus (Stål)	VC10	- VC11	-
Peritrechus geniculatus (Hahn)	VC10	VC11	- VC12 (15)
Peritrechus gracilicornis Puton	VC10	-	VC12 (15)

LYGAEIDAE (CONTINUED)			
Peritrechus lundii (Gmelin)	VC10 (54)		
Peritrechus tunati (Gileini) Peritrechus nubilus (Fallén)	VC10 (54) VC10 (52)	-	- VC12 (15)
	, ,	- V(C) 1	VC12 (15)
Plinthisus brevipennis (Latreille)	VC10	VC11	-
Rhyparochromus pini (Linnaeus)	VC10 (49)	VC11	VC12 (15)
Scolopostethus affinis (Schilling)	VC10	-	-
Scolopostethus decoratus (Hahn)	VC10	-	-
Scolopostethus grandis Horváth	VC10 (61)	-	-
Scolopostethus pictus (Schilling) [DELETED]	_	-	-
Scolopostethus puberulus Horváth [DELETED]	_	-	-
Scolopostethus thomsoni Reuter	VC10	_	_
Stygnocoris fuligineus (Geoffroy)	VC10	_	_
Stygnocoris rusticus (Fallén)	VC10	VC11	_
Stygnocoris sabulosus (Schilling)	VC10 (53)	VCII	-
		-	-
Taphropeltus contractus (Herrich-Schaeffer)	VC10		1/012 (2)
Trapezonotus desertus Seidenstücker	-	-	VC12 (3)
Trapezonotus dispar Stål	-	-	VC12 (5)
Tropistethus holosericus (Scholtz)	VC10	-	-
BERYTIDAE			
Berytinus clavipes (Fabricius)	VC10	-	-
Berytinus crassipes (Herrich-Schaeffer)	_	VC11	VC12 (16)
Berytinus hirticornis (Brullé)	VC10 (14)	-	-
Berytinus minor (Herrich-Schaeffer)	VC10	VC11	_
Berytinus montivagus (Meyer-Dür)	VC10	-	
	VC10 VC10		-
Berytinus signoreti (Fieber)		- VC11	-
Gampsocoris punctipes (Germar)	VC10	VC11	-
Metatropis rufescens (Herrich-Schaeffer)	VC10	VC11	-
Neides tipularius (Linnaeus)	VC10	VC11	-
D			
PIESMATIDAE	******	******	
Parapiesma quadratum (Fieber)	VC10	VC11	-
Piesma maculatum (Laporte)	VC10	VC11	-
Thigh ar			
TINGIDAE		VC11	
Acalypta brunnea (Germar)	-	VC11	-
Acalypta carinata (Panzer)	-	VC11	-
Acalypta parvula (Fallén)	VC10	VC11	-
Agramma laetum (Fallén)	VC10 (12)	VC11	-
Campylosteira verna (Fallén)	VC10	-	-
Catoplatus fabricii (Stål)	VC10 (52)	-	VC12 (15)
Derephysia foliacea (Fallén)	VC10 (54)	VC11	-
Dictyla convergens (Herrich-Schaeffer)	VC10 (49)	_	_
Dictyonota fuliginosa A. Costa [DELETED]	-	_	_
Dictyonota strichnocera Fieber	VC10	VC11	
		VCII	-
Kalama tricornis (Schrank)	VC10 (45)	-	-
Oncochila simplex (Herrich-Schaeffer)	VC10	VC11	-
Physatocheila dumetorum (Herrich-Schaeffer)	VC10 (45)	VC11	-
Physatocheila smreczynskii China	VC10 (49)	VC11	-
Stephanitis rhododrendri Horváth [DELETED]	-	-	-
Tingis ampliata (Herrich-Schaeffer)	VC10	VC11	-
Tingis cardui (Linnaeus)	VC10 (53)	-	-
Tingis reticulata Herrich-Schaeffer	-	VC11	VC12 (38)
			(/

REDUVIIDAE			
Empicoris baerensprungi (Dohrn)	_	VC11	VC12 (18)
Empicoris culiciformis (De Geer)	_	VC11 VC11	-
Empicoris vagabundus (Linnaeus)	VC10	VC11(60)	_
Pygolampis bidentata (Goeze)	-	VC11(00) VC11	_
Reduvius personatus (Linnaeus)	_	VC11 VC11	_
Reduvius personalus (Ellinacus)		VCII	_
Nabidae			
Himacerus apterus (Fabricius)	-	VC11	-
Himacerus boops (Schiødte)	VC10	-	-
Himacerus major (A. Costa)	VC10 (53)	-	-
Himacerus mirmicoides (O. Costa)	VC10	VC11	-
Nabis ericetorum Scholtz	VC10 (45)	-	-
Nabis ferus (Linnaeus)	VC10 (49)	-	-
Nabis flavomarginatus Scholtz	VC10	-	-
Nabis limbatus Dahlbom	VC10 (53)	-	-
Nabis lineatus Dahlbom	VC10	-	-
Nabis pseudoferus Remane	-	VC11 (7)	-
Nabis rugosus (Linnaeus)	VC10 (12)	-	-
ANTHOCORIDAE			
Acompocoris alpinus Reuter [DELETED]			
Acompocoris pygmaeus (Fallén)	VC10	VC11	-
Anthocoris butleri Le Quesne [NEW]	VC10 (47)	-	
Anthocoris confusus Reuter	VC10 (47) VC10	-	-
Anthocoris gallarumulmi (De Geer)	VC10	VC11	-
Anthocoris guitarumumi (De Geer) Anthocoris limbatus Fieber	-	VC11 (21)	-
Anthocoris timodius (Fabricius)	- VC10	VC11 (21)	-
Anthocoris nemorans (Fabricius) Anthocoris nemorum (Linnaeus)	VC10 VC10	-	-
Anthocoris sarothamni Douglas & Scott [DELETED]	V C 10 -	-	-
Brachysteles parvicornis (A. Costa)	VC10	-	-
Cardiastethus fasciiventris (Garbiglietti)	VC10 (61)	-	-
Elatophilus nigricornis (Zetterstedt)	VC10 (01)	VC11 (55)	-
Lyctocoris campestris (Fabricius)	VC10	VC11 (33)	-
Orius laevigatus (Fieber)	VC10 (63)	-	-
Orius laticollis (Reuter)	VC10 (03) VC10 (37)	VC11 (37)	-
Orius majusculus (Reuter)	VC10 (37) VC10 (63)	VC11 (37)	-
Orius majusculus (Redder) Orius niger (Wolff)	VC10 (03) VC10 (A)	VC11 (63)	-
Temnostethus gracilis Horváth	VC10 (A) VC10 (9)	VC11 (03) VC11 (1)	-
Temnostethus pusillus (Herrich-Schaeffer)	VC10 (9) VC10 (A)		VC12 (1)
Temnostethus tibialis Reuter	VC10 (A)	-	VC12 (1) VC12 (11)
Tetraphleps bicuspis (Herrich-Schaeffer)	-	VC11	VC12 (11)
Xylocoris cursitans (Fallén)	VC10	VCII	-
Xylocoris formicetorum (Boheman) [DELETED]	VC10	-	-
Xylocoris galactinus (Fieber)	- VC10	-	-
Aylocorts galactinus (Flebel)	VCIO	-	-
CIMICIDAE			
Cimex lectularius Linnaeus	VC10 (54)	-	-
Cimex pipistrelli Jenyns [DELETED]	-	-	-
Oeciacus hirundinis (Lamarck)	VC10 (61)	-	-
MICROPHYSIDAE			
Loricula distinguenda (Reuter)	-	VC11	_
Loricula elegantula (Baerensprung)	VC10	VC11	-
Loricula exilis (Fallén) [DELETED]	-	-	-

MICROPHYSIDAE (CONTINUED)			
Loricula inconspicua (Douglas & Scott)	VC10	-	_
Loricula pselaphiformis Curtis	_	VC11	-
Miridae			
Acetropis gimmerthalii (Flor)	VC10 (45)	VC11	-
Adelphocoris lineolatus (Goeze)	VC10	VC11	-
Adelphocoris seticornis (Fabricius)	VC10	-	-
Adelphocoris ticinensis (Meyer-Dür)	VC10	VC11	VC12 (15)
Alloeotomus gothicus (Fallén)	-	VC11 (38)	VC12 (2)
Amblytylus brevicollis Fieber [DELETED]	-	-	-
Amblytylus nasutus (Kirschbaum)	VC10	VC11	-
Apolygus lucorum (Meyer-Dür)	VC10	VC11	-
Apolygus spinolae (Meyer-Dür)	VC10	VC11	-
Asciodema obsoleta (Fieber)	VC10	-	-
Atractotomus magnicornis (Fallén)	VC10 (48)	-	VC12
Atractotomus mali (Meyer-Dür)	VC10	VC11	-
Atractotomus parvulus Reuter	-	VC11 (35)	-
Blepharidopterus angulatus (Fallén)	VC10	-	-
Blepharidopterus diaphanus (Kirschbaum)	VC10 (45)	VC11	-
Brachyarthrum limitatum Fieber [DELETED]	-	-	-
Bryocoris pteridis (Fallén)	VC10 (45)	VC11	-
Calocoris roseomaculatus (De Geer)	VC10	-	-
Camptozygum aequale (Villers) [DELETED]	-	-	-
Campylomma annulicorne (Signoret) [NEW]	VC10 (45)	-	-
Campyloneura virgula (Herrich-Schaeffer)	VC10	-	-
Capsodes flavomarginatus (Donovan)	-	VC11	-
Capsodes gothicus (Linnaeus)	VC10 (49)	VC11	-
Capsodes sulcatus (Fieber)	VC10	VC11	-
Capsus ater (Linnaeus)	VC10	-	-
Capsus wagneri (Remane)	VC10 (31)	-	-
Charagochilus gyllenhalii (Fallén)	VC10	VC11	-
Charagochilus weberi Wagner	-	-	VC12 (10)
Chlamydatus evanescens (Boheman)	-	VC11 (40)	-
Chlamydatus pullus (Reuter) [NEW]	VC10 (45)	-	-
Chlamydatus saltitans (Fallén)	VC10	VC11	-
Closterotomus fulvomaculatus (De Geer)	VC10	-	-
Closterotomus norwegicus (Gmelin)	VC10	VC11	-
Compsidolon salicellum (Herrich-Schaeffer)	VC10	VC11	-
Conostethus griseus Douglas & Scott	VC10 (12)	-	-
Cyllecoris histrionius (Linnaeus)	VC10 (54)	-	-
Cyrtorhinus caricis (Fallén)	VC10	VC11	-
Deraeocoris flavilinea (A. Costa)	VC10 (52)	VC11 (39)	-
Deraeocoris lutescens (Schilling) [NEW]	VC10 (12)	-	-
Deraeocoris olivaceus (Fabricius)	-	-	VC12 (9)
Deraeocoris ruber (Linnaeus)	VC10	-	-
Deraeocoris scutellaris (Fabricius)	VC10 (61)	VC11 (20)	-
Dichrooscytus gustavi Josifov	-	-	VC12 (8)
Dichrooscytus rufipennis (Fallén)	VC10	VC11	-
Dicyphus annulatus (Wolff)	VC10	-	-
Dicyphus constrictus (Boheman)	VC10	VC11	-
Dicyphus epilobii Reuter	VC10	-	-
Dicyphus errans (Wolff)	VC10	VC11	-
Dicyphus globulifer (Fallén)	VC10	VC11	-
Dicyphus pallicornis (Fieber)	VC10	-	-

MIRIDAE (CONTINUED)			
Dicyphus pallidus (Herrich-Schaeffer)	-	_	VC12 (42)
Dicyphus stachydis J. Sahlberg	VC10	VC11	-
Dryophilocoris flavoquadrimaculatus (De Geer)	VC10 (12)	VC11	-
Fieberocapsus flaveolus (Reuter) [DELETED]	-	-	-
Globiceps flavomaculatus (Fabricius)	-	VC11	-
Globiceps fulvicollis Jakovlev	-	VC11 (44)	-
Globiceps juniperi Reuter	-	-	VC12 (22)
Grypocoris stysi (Wagner) [NEW]	-	-	VC12 (59)
Hallodapus rufescens (Burmeister)	VC10 (51)	VC11	-
Halticus apterus (Linnaeus) [DELETED]	-	-	-
Halticus luteicollis (Panzer)	VC10	-	-
Halticus saltator (Geoffroy) [DELETED]	-	-	-
Harpocera thoracica (Fallén)	VC10 (12)	VC11	-
Heterocordylus genistae (Scopoli)	VC10 (54)		-
Heterocordylus tibialis (Hahn)	VC10 (49)	VC11	-
Heterotoma planicornis (Pallas)	VC10	-	-
Hoplomachus thunbergii (Fallén) [DELETED]	-	-	-
Hypseloecus visci (Puton)	-	VC11 (24)	-
Leptopterna dolabrata (Linnaeus)	VC10	-	-
Leptopterna ferrugata (Fallén)	VC10	VC11	-
Liocoris tripustulatus (Fabricius)	VC10	-	-
Lopus decolor (Fallén)	VC10	VC11	-
Lygocoris pabulinus (Linnaeus)	VC10	VC11	-
Lygocoris rugicollis (Fallén)	VC10	-	-
Lygus maritimus Wagner		VC11 (28)	-
Lygus pratensis (Linnaeus)	VC10 (A)	VC11 (4)	-
Lygus rugulipennis Poppius	VC10 (12)	-	-
Macrolophus rubi Woodroffe [DELETED]	-	-	-
Macrotylus paykullii (Fallén)	VC10	VC11	-
Macrotylus solitarius (Meyer-Dür)	-	-	VC12 (6)
Malacocoris chlorizans (Panzer)	VC10	VC11	-
Mecomma ambulans (Fallén)	VC10	VC11	-
Megacoelum beckeri (Fieber) [DELETED]	-	-	-
Megacoelum infusum (Herrich-Schaeffer)	VC10	VC11	-
Megaloceroea recticornis (Geoffroy)	VC10 (49)	VC11	-
Megalocoleus molliculus (Fallén)	VC10	VC11	-
Megalocoleus tanaceti (Fallén)	VC10	VC11(60)	-
Miridius quadrivirgatus (A. Costa)	VC10	-	VC12 (38)
Miris striatus (Linnaeus)	VC10 (45)	-	-
Monalocoris filicis (Linnaeus)	VC10	-	-
Myrmecoris gracilis (R.F. Sahlberg)	-	VC11	VC12 (18)
Neolygus contaminatus (Fallén)	VC10	VC11	-
Neolygus populi (Leston)	VC10 (52)	-	VC12 (9)
Neolygus viridis (Fallén)	VC10	VC11	-
Notostira elongata (Geoffroy)	VC10 (12)	-	-
Oncotylus viridiflavus (Goeze) [NEW]	VC10 (46)	-	-
Orthocephalus coriaceus (Fabricius)	VC10 (52)	-	-
Orthocephalus saltator (Hahn)	VC10	VC11	-
Orthonotus rufifrons (Fallén)	VC10	VC11	-
Orthops campestris (Linnaeus)	VC10 (A)	-	-
Orthops kalmii (Linnaeus)	VC10 (A)	-	-
Orthotylus bilineatus (Fallén)	-	VC11	-
Orthotylus concolor (Kirschbaum)	VC10 (45)	-	-
Orthotylus ericetorum (Fallén)	VC10	VC11	-

MIDIDAE (CONTINUED)			
MIRIDAE (CONTINUED) Orthotylus flavinervis (Kirschbaum)	VC10	VC11	_
Orthotylus flavosparsus (C.R. Sahlberg)	VC10 VC10	VC11	_
Orthotylus marginalis Reuter	VC10 VC10	VC11	_
Orthotylus manginatis Redicti Orthotylus moncreaffi (Douglas & Scott)	VC10 VC10	VC11	_
Orthotylus nassatus (Fabricius)	VC10 (45)	VC11	_
Orthotylus ochrotrichus Fieber	VC10 (43)	-	_
Orthotylus prasinus (Fallén)	-	VC11	_
Orthotylus rubidus (Puton)	VC10	VC11	_
Orthotylus tenellus (Fallén)	VC10	VC11	_
Orthotylus virescens (Douglas & Scott)	VC10 (A)	-	_
Orthotylus viridinervis (Kirschbaum) [DELETED]	-	_	_
Pantilius tunicatus (Fabricius)	VC10 (47)	_	_
Parapsallus vitellinus (Scholtz) [DELETED]	-	_	_
Phoenicocoris obscurellus (Fallén)	VC10	VC11	_
Phylus coryli (Linnaeus)	VC10	-	_
Phylus melanocephalus (Linnaeus)	VC10	VC11	_
Phytocoris dimidiatus Kirschbaum	VC10 (49)	VC11	_
Phytocoris longipennis Flor	VC10	VC11	_
Phytocoris populi (Linnaeus)	-	VC11	_
Phytocoris reuteri Saunders	VC10	VC11	_
Phytocoris tiliae (Fabricius)	VC10 (53)	VC11	_
Phytocoris ulmi (Linnaeus)	VC10	VC11	_
Phytocoris varipes Boheman	VC10	VC11	_
Pilophorus cinnamopterus (Kirschbaum)	VC10 (A)	VC11	_
Pilophorus clavatus (Linnaeus)	-	VC11	_
Pilophorus perplexus Douglas & Scott	VC10 (49)	VC11	_
Pinalitus atomarius (Meyer-Dür) [DELETED]	-	-	_
Pinalitus cervinus (Herrich-Schaeffer)	VC10	VC11	-
Pinalitus rubricatus (Fallén)	-	VC11	-
Pithanus maerkelii (Herrich-Schaeffer)	VC10	-	-
Plagiognathus arbustorum (Fabricius)	VC10	-	-
Plagiognathus chrysanthemi (Wolff)	VC10	VC11	-
Platycranus bicolor (Douglas & Scott)	VC10 (45)	VC11	-
Plesiodema pinetella (Zetterstedt) [DELETED]	-	-	-
Polymerus nigrita (Fallén)	VC10 (45)	-	-
Polymerus palustris (Reuter)	VC10	-	-
Polymerus unifasciatus (Fabricius)	-	VC11	-
Psallus ambiguus (Fallén)	VC10 (45)	VC11	-
Psallus assimilis Stichel	VC10 (12)	VC11 (44)	VC12 (8)
Psallus confusus Rieger [NEW]	VC10 (A)	-	-
Psallus falleni Reuter	VC10 (45)	VC11	-
Psallus flavellus Stichel [DELETED]	-	-	-
Psallus haematodes (Gmelin)	VC10	-	-
Psallus lepidus Fieber	VC10	VC11	-
Psallus perrisi (Mulsant & Rey)	VC10 (45)	-	-
Psallus salicis (Kirschbaum)	-	VC11	-
Psallus variabilis (Fallén)	VC10 (A)	-	-
Psallus varians (Herrich-Schaeffer)	VC10 (12)	VC11	-
Psallus wagneri Ossiannilsson [NEW]	VC10 (45)	-	-
Pseudoloxops coccineus (Meyer-Dür)	VC10 (49)	-	-
Rhabdomiris striatellus (Fabricius)	VC10	VC11	-
Salicarus roseri (Herrich-Schaeffer)	VC10 (45)	-	-
Stenodema calcarata (Fallén)	VC10 (12)	- VO11	-
Stenodema holsata (Fabricius)	VC10	VC11	-

MIRIDAE (CONTINUED)			
Stenodema laevigata (Linnaeus)	VC10 (12)	_	_
Stenodema trispinosa Reuter	-	VC11 (21)	_
Stenotus binotatus (Fabricius)	VC10	-	_
Sthenarus rotermundi (Scholtz)	VC10	VC11	_
Strongylocoris leucocephalus (Linnaeus)	VC10	VC11	_
Strongylocoris luridus (Fallén)	-	VC11	_
	VC10 (54)	VC11 (18)	VC12
Systellonotus triguttatus (Linnaeus)			VC12
Teratocoris antennatus (Boheman)	VC10 (49)	VC11	-
Teratocoris saundersi Douglas & Scott	VC10 (45)	VC11	-
Tinicephalus hortulanus (Meyer-Dür)	VC10 (52)		-
Trigonotylus psammaecolor Reuter	VC10 (45)		-
Tuponia brevirostris Reuter	VC10 (48)		-
Tuponia mixticolor (A. Costa)	VC10 (13)	VC11 (13)	-
Tytthus pygmaeus (Zetterstedt)	VC10	-	-
CERATOCOMBIDAE			
Ceratocombus coleoptratus (Zetterstedt)	-	VC11	-
Dingagonin i i			
DIPSOCORIDAE		VC11	
Cryptostemma alienum Herrich-Schaeffer	-	VC11	-
Pachycoleus waltli Fieber	-	VC11	-
SALDIDAE			
Chartoscirta cincta (Herrich-Schaeffer)	VC10	VC11	_
Chartoscirta cocksii (Curtis)	VC10	VC11	_
Halosalda lateralis (Fallén)	VC10	VC11	_
Salda littoralis (Linnaeus)	VC10	VC11	_
Saldula arenicola (Scholtz)	VC10	VC11	_
Saldula c-album (Fieber)	VC10	-	_
Saldula orthochila (Fieber)	VC10 VC10	VC11	_
Saldula pallipes (Fabricius) [NEW]			-
	VC10 (A)	-	-
Saldula palustris (Douglas) [NEW]	VC10 (45)	- V(C1.1	-
Saldula pilosella (Thomson)	VC10	VC11	-
Saldula saltatoria (Linnaeus)	VC10	-	-
AEPOPHILIDAE			
Aepophilus bonnairei Signoret	VC10	-	-
MESOVELIIDAE			
Mesovelia furcata Mulsant & Rey	VC10 (A)	_	VC12 (36)
nesovena jureana namana a neg	(11)		(00)
HEBRIDAE			
Hebrus pusillus (Fallén)	VC10	VC11	-
Hebrus ruficeps Thomson	-	VC11	VC12 (36)
Hydrometridae			
		VC11 (26)	
Hydrometra gracilenta Horváth	- VC10	VC11 (36)	- V(C12 (26)
Hydrometra stagnorum (Linnaeus)	VC10	VC11 (30)	VC12 (36)
VELIIDAE			
Microvelia pygmaea (Dufour)	VC10 (36)		VC12 (36)
Microvelia reticulata (Burmeister)	VC10 (A)	VC11 (36)	VC12 (36)
Velia caprai Tamanini	VC10 (36)	VC11 (36)	VC12 (36)
Velia saulii Tamanini	-	VC11 (36)	_
		. ,	

Connector			
GERRIDAE		VC11	VC12 (26)
Aquarius najas (De Geer)	- VC10	VC11	VC12 (36)
Aquarius paludum (Fabricius)	VC10	VC11	VC12 (36)
Gerris argentatus Schummel	- N/C10	VC11	VC12 (36)
Gerris gibbifer Schummel	VC10	VC11	VC12 (36)
Gerris lacustris (Linnaeus)	VC10	VC11 (36)	VC12 (36)
Gerris lateralis Schummel	-	VC11 (25)	-
Gerris odontogaster (Zetterstedt)	VC10 (36)	VC11	VC12 (36)
Gerris thoracicus Schummel	VC10	VC11 (36)	VC12 (36)
Nepidae			
Nepa cinerea Linnaeus	VC10	VC11 (36)	VC12 (36)
Ranatra linearis (Linnaeus)	VC10	VC11 (30)	VC12 (36)
Restaura unearis (Emmaeus)	VC10	VC11	VC12 (30)
Naucoridae			
Ilyocoris cimicoides (Linnaeus)	VC10	VC11	VC12 (36)
APHELOCHEIRIDAE			
Aphelocheirus aestivalis (Fabricius)	_	VC11 (36)	VC12 (36)
Aphetochetrus destivutis (1 doricius)	_	VC11 (30)	VC12 (30)
NOTONECTIDAE			
Notonecta glauca Linnaeus	VC10 (36)	VC11	VC12 (36)
Notonecta maculata Fabricius	VC10 (36)	VC11	VC12 (36)
Notonecta obliqua Thunberg	VC10 (36)	VC11	VC12 (36)
Notonecta viridis Delcourt	VC10 (36)	VC11 (36)	VC12 (36)
Dreibae			
PLEIDAE			
Dlag minutigain a Locab	VC10	V/C11	VIC12 (26)
Plea minutissima Leach	VC10	VC11	VC12 (36)
	VC10	VC11	VC12 (36)
CORIXIDAE	VC10	VC11	VC12 (36)
CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED]	VC10 -	VC11	VC12 (36)
CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED] Arctocorisa germari (Fieber) [DELETED]	- -	- -	-
CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED] Arctocorisa germari (Fieber) [DELETED] Callicorixa praeusta (Fieber)	- - VC10	- - VC11 (36)	VC12 (36) VC12 (36)
CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED] Arctocorisa germari (Fieber) [DELETED] Callicorixa praeusta (Fieber) Corixa affinis Leach	- - VC10 VC10 (36)	- VC11 (36) VC11 (36)	- - VC12 (36)
CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED] Arctocorisa germari (Fieber) [DELETED] Callicorixa praeusta (Fieber) Corixa affinis Leach Corixa dentipes Thomson	- VC10 VC10 (36) VC10 (36)	- - VC11 (36)	- VC12 (36) - VC12 (36)
CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED] Arctocorisa germari (Fieber) [DELETED] Callicorixa praeusta (Fieber) Corixa affinis Leach Corixa dentipes Thomson Corixa panzeri Fieber	- VC10 VC10 (36) VC10 (36) VC10 (36)	- VC11 (36) VC11 (36) -	- VC12 (36) - VC12 (36) VC12 (36)
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CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED] Arctocorisa germari (Fieber) [DELETED] Callicorixa praeusta (Fieber) Corixa affinis Leach Corixa dentipes Thomson Corixa panzeri Fieber Corixa punctata (Illiger) Cymatia bonsdorffii (C.R. Sahlberg) Cymatia coleoptrata (Fabricius) Glaenocorisa cavifrons (Thomson) [DELETED] Hesperocorixa castanea (Thomson) Hesperocorixa linnaei (Fieber) Hesperocorixa sahlbergi (Fieber) Micronecta griseola Horváth Micronecta minutissima (Linnaeus) Micronecta poweri (Douglas & Scott) Micronecta scholtzi (Fieber) Paracorixa concinna (Fieber) Sigara distincta (Fieber) Sigara dorsalis (Leach) Sigara falleni (Fieber)	- VC10 VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36)	- VC11 (36) VC11 (36) - VC11 (36) VC11 (36)	- VC12 (36) - VC12 (36) VC12 (36) VC12 (36) - VC12 (36) - VC12 (36) VC12 (36)
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CORIXIDAE Arctocorisa carinata (C.R. Sahlberg) [DELETED] Arctocorisa germari (Fieber) [DELETED] Callicorixa praeusta (Fieber) Corixa affinis Leach Corixa dentipes Thomson Corixa panzeri Fieber Corixa punctata (Illiger) Cymatia bonsdorffii (C.R. Sahlberg) Cymatia coleoptrata (Fabricius) Glaenocorisa cavifrons (Thomson) [DELETED] Hesperocorixa castanea (Thomson) Hesperocorixa linnaei (Fieber) Hesperocorixa sahlbergi (Fieber) Micronecta griseola Horváth Micronecta minutissima (Linnaeus) Micronecta poweri (Douglas & Scott) Micronecta scholtzi (Fieber) Paracorixa concinna (Fieber) Sigara distincta (Fieber) Sigara dorsalis (Leach) Sigara falleni (Fieber)	- VC10 VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36) VC10 (36)	- VC11 (36) VC11 (36) - VC11 (36) VC11 (36)	- VC12 (36) - VC12 (36) VC12 (36) VC12 (36) - VC12 (36) - VC12 (36) VC12 (36)

CORIXIDAE (CONTINUED)

 Sigara nigrolineata (Fieber)
 VC10
 VC11
 VC12 (36)

 Sigara scotti (Douglas & Scott)
 VC11 (36)
 VC12 (36)

 Sigara selecta (Fieber) [DELETED]

 Sigara semistriata (Fieber)
 VC10 (A)

 Sigara stagnalis (Leach)
 VC10 (36)
 VC11 (36)

 Sigara venusta (Douglas & Scott)
 VC10
 VC11 (36)
 VC12 (36)

TABLE 1. The references relating to the numbers in the list of divided records.

1	Le Quesne (1955)	34	Paul (2006)
2	Woodroffe (1956)	35	Lattin & Ozanne (1994)
3	Woodroffe (1960c)	36	Huxley (2003)
4	Woodroffe (1966)	37	Nau (1984)
5	Woodroffe (1960a)	38	Denton (2004)
6	Woodroffe (1960b)	39	Dickson (2004)
7	Ryle (1960)	40	Nau & Brooke (2006)
8	Woodroffe (1962)	41	Ryan (2012b)
9	Woodroffe (1963)	42	Ryan (2011)
10	Woodroffe (1965)	43	Denton (2012)
11	Woodroffe (1971)	44	Dickson (2012)
12	Le Quesne (1974)	45	Biggs (1997)
13	Nau (1980)	46	Biggs (1998)
14	Dolling (1983)	47	Biggs (2001)
15	Denton (1997b)	48	Biggs (2008a)
16	Denton (1997a)	49	Biggs (2008b)
17	Whitehead (2004)	50	Biggs (2011a)
18	Denton (2001)	51	Biggs (2011b)
19	Appleton (1984)	52	Biggs (2012)
20	Appleton (1986)	53	Brown (1924)
21	Appleton (1987)	54	Morey (1909)
22	Alexander et al. (1999)	55	Massee (1945)
23	Dickson (2002)	56	Southgate & Woodroffe (1952)
24	Gibbs & Nau (2005)	57	Southgate & Woodroffe (1953)
25	Denton (2005)	58	Ryan (2012c)
26	Dickson (2007)	59	Ryan (2015b)
27	Denton (2007)	60	Dickson (2015)
28	Biggs & Langmaid (2006)	61	Biggs (2013)
29	Dickson (2009)	62	Biggs (2014)
30	Salisbury et al. (2009)	63	Britten (1939)
31	Denton (2010)	64	Bedwell (1924)
32	Dolling (1978)	65	Biggs (2015)
33	Harvey (2006)		

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Appendix: previously unpublished records for the Isle of Wight

Orius niger (Wolff) 20 August 2007, Royal Spithead Hotel (rec. Nau, Dr B.S.). Temnostethus pusillus (Herrich-Schaeffer) 19 August 2007, Newtown Harbour SSSI, (rec. Nau, Dr B.S.). **MIRIDAE** Lygus pratensis (Linnaeus) 20 August 2007, Bembridge Spit (rec. Brooke, S.). Orthops campestris (Linnaeus) 03 Sepember 1990, Chale, Windmill Copse (rec. Biggs, D. T., det. Biggs, D. T.). Orthops kalmii (Linnaeus) 28 August 1994, Alverstone (rec. Biggs D.T. & Cheverton, J.M., det. Biggs, D. T.). Orthotylus virescens (Douglas & Scott) 19 August 1979, St Helen's Duver (rec. Nau, Dr B.S.). *Pilophorus cinnamopterus* (Kirschbaum) 19 July 2010, Newchurch Lynch (rec. Boyd, I., det. Biggs, D. T.). Psallus confusus Rieger 23 June 1990, Shalfleet (rec. Biggs, D. T., det. Biggs, D. T.). Psallus variabilis (Fallén) 21 June 1997, Alverstone Mead (rec. Biggs, D. T., det. Biggs, D. T.).

SALDIDAE

ANTHOCORIDAE

Saldula pallipes (Fabricius)

20 August 2007, St Catherines Point (rec. Nau, Dr B.S.).

MESOVELIIDAE

Mesovelia furcata Mulsant & Rey 30 July 1996, Alverstone, Burnt House (rec. Ashdown, M.).

VELIIDAE

Microvelia reticulata (Burmeister) 22 June 1995, Shide Chalkpit (rec. Ashdown, M.).

CORIXIDAE

Sigara semistriata (Fieber) 22 March 1999, Alverstone, Scotchell's Brook, (rec. Ashdown, M.).

NEW VICE-COUNTY RECORDS OF HEMIPTERA-HETEROPTERA FOR WATSONIAN NORTH HAMPSHIRE (VC12)

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The division of the county list of Hemiptera-Heteroptera for Hampshire into separate lists for the three constituent vice-counties (Ryan, 2016) resulted in very few records for Watsonian North Hampshire (VC12). Anticipating this problem, in 2015 I made three recording visits to the vice-county, in the vicinity of Burghclere, just over the border with Berkshire, and I present the resulting new vice-county records below.

My first visit was to the National Trust's The Chase, Broad Layings (National Grid Reference SU443627) on 15 June, undertaking general sweeping and beating along the rides and in the clearings (records marked [A]). Some suction sampling of moss was also done, using a Vax Life hand-held vacuum cleaner (Ryan, 2012) [B]. The next visit was on 25 June to Great Pen Wood (SU450622), using sweeping and beating [C] and suction sampling [D]. On the same day, I beat an oak tree in Pound Street (SU451615) [E], and used sweeping and beating along a bridleway and dismantled railway line (SU473592) [F]. My final visit was on 17 July to The Chase, beating and sweeping as before [G]. I also discovered a patch of stonecrop, *Sedum* spp. (Crassulaceae), on the wide verge of a road corner (SU461606), and sampled it with my vacuum cleaner [H].

There were also some unpublished records in my voucher specimen collection: 3 August 2010, Fleet Pond Nature Reserve, Fleet, sweeping ericaceous heath (SU824553) [I] and beating birch, *Betula* spp. (Betulaceae) (SU825550) [J]; and 18 July 2011 sweeping at The Chase [K].

The new vice-county records for North Hampshire (VC12), listed below, include three species new to Ryan's list for Hampshire as a whole (*Macrolophus pygmaeus* (Rambur), *Psallus albicinctus* (Kirschbaum) and *Psallus helenae* Josifov) and two species restored to the list, having been deleted due to the known records being insufficiently precise to be allocated to a particular vice-county (*Drymus ryeii* Douglas & Scott and *Macrolophus rubi* Woodroffe).

ACANTHOSOMATIDAE

Elasmostethus interstinctus (Linnaeus) [C]

SCUTELLERIDAE

Eurygaster testudinaria (Geoffroy) [A]

PENTATOMIDAE

Dolycoris baccarum (Linnaeus) [A] Palomena prasina (Linnaeus) [A]

PENTATOMIDAE (CONTINUED)

Piezodorus lituratus (Fabricius) [A]

Picromerus bidens (Linnaeus) [G]

Pentatoma rufipes (Linnaeus) [G]

COREIDAE

Coreus marginatus (Linnaeus) [A] [C] Coriomeris denticulatus (Scopoli) [C]

LYGAEIDAE

Cymus melanocephalus Fieber [A]

Drymus ryeii Douglas & Scott [A]

Ischnodemus sabuleti (Fallén) [F]

Kleidocerys resedae (Panzer) [A] [C]

Lasiosomus enervis (Herrich-Schaeffer) [C]

Scolopostethus affinis (Schilling) [F]

Scolopostethus thomsoni Reuter [F]

BERYTIDAE

Metatropis rufescens (Herrich-Schaeffer) [A]

TINGIDAE

Acalypta carinata (Panzer) [D] [B] Acalypta parvula (Fallén) [H]

Nabidae

Nabis ericetorum Scholtz [I] Nabis rugosus (Linnaeus) [C] [F]

ANTHOCORIDAE

Anthocoris confusus Reuter [E] [F] [G] Anthocoris nemorum (Linnaeus) [F]

MIRIDAE

Amblytylus nasutus (Kirschbaum) [C] [F]

Asciodema obsoleta (Fieber) [G]

Atractotomus mali (Meyer-Dür) [F]

Bryocoris pteridis (Fallén) [G]

Campyloneura virgula (Herrich-Schaeffer) [G]

Capsus ater (Linnaeus) [A] [F]

Charagochilus gyllenhalii (Fallén) [F]

Chlamydatus evanescens (Boheman) [H]

Closterotomus norwegicus (Gmelin) [F]

Closterotomus fulvomaculatus (De Geer) [F]

Compsidolon salicellum (Herrich-Schaeffer) [G]

Cyllecoris histrionius (Linnaeus) [A]

Deraeocoris flavilinea (A. Costa) [F]

Deraeocoris lutescens (Schilling) [C]

Dicyphus errans (Wolff) [F]

Dicyphus stachydis J. Sahlberg [F]

Heterotoma planicornis (Pallas) [G]

Leptopterna dolabrata (Linnaeus) [F]

Liocoris tripustulatus (Fabricius) [F]

Lygocoris pabulinus (Linnaeus) [F] [G]

Macrolophus pygmaeus (Rambur) [F]

MIRIDAE (CONTINUED)

Macrolophus rubi Woodroffe [G] [K]

Mecomma ambulans (Fallén) [C] [G]

Megaloceroea recticornis (Geoffroy) [F]

Monalocoris filicis (Linnaeus) [G]

Neolygus contaminatus (Fallén) [C]

Neolygus viridis (Fallén) [G]

Notostira elongata (Geoffroy) [C]

Orthonotus rufifrons (Fallén) [F] [G] [K]

Orthops campestris (Linnaeus) [F]

Orthotylus prasinus (Fallén) [G]

Phylus melanocephalus (Linnaeus) [E] [A]

Phytocoris longipennis Flor [G]

Pithanus maerkelii (Herrich-Schaeffer) [A] [F]

Plagiognathus arbustorum (Fabricius) [C] [F]

Plagiognathus chrysanthemi (Wolff) [G]

Psallus albicinctus (Kirschbaum) [A]

Psallus falleni Reuter [J]

Psallus helenae Josifov [G]

Psallus mollis (Mulsant & Rey) [E]

Psallus perrisi (Mulsant & Rey) [A] [G]

Psallus variabilis (Fallén) [F]

Psallus varians (Herrich-Schaeffer) [A] [E] [G]

Psallus wagneri Ossiannilsson [E]

Stenodema calcarata (Fallén) [C]

Stenodema laevigata (Linnaeus) [A] [C]

Stenotus binotatus (Fabricius) [F]

SALDIDAE

Chartoscirta cincta (Herrich-Schaeffer) [G]

Saldula saltatoria (Linnaeus) [G]

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SOME RECORDS OF HEMIPTERA-HETEROPTERA FROM HERTFORDSHIRE (VC20)

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A VC20 record of Graptopeltus lynceus (Fabricius) (Lygaeidae) from 1925

In the previous issue (Gray, 2015), I described the recent discovery of *Graptopeltus lynceus* (Fabricius) at Waterford Heath in VC20, which I suspected to be a first record for the county. After the publication of that report, Trevor James (Archivist for the Hertfordshire Natural History Society) kindly sent me a list of old records that he had obtained from the Biological Records Centre database. Many of these records had been manually extracted by John Widgery (my predecessor as terrestrial Heteroptera county recorder for VC20) from a long series of papers published during the 1970s and 1980s in the *London Naturalist*, which was compiled by Eric Groves. Among the dataset I was sent was a lone VC20 record for *Graptopeltus lynceus* (Fabricius) from Watford (TQ09) on 1 February 1925 (details of other significant species in the dataset are described at the end of this report).

It is also worth adding here that I returned to Waterford Heath on 19 July 2015 and found another adult *Graptopeltus lynceus* (Fabricius), as well as several larvae that I presume to be nymphs of the species. The nymphs were swept off Viper's-bugloss *Echium vulgare* (Linnaeus), Mullein *Verbascum* sp., and Houndstongue *Cynoglossum officinale* Linnaeus.

Two probable new species for VC20 recorded at Amwell Nature Reserve

On 15 August, two colleagues and I spent the day surveying invertebrates at Amwell Nature Reserve as part of the meeting schedule of the newly formed Herts Invertebrate Project. After completing our planned recording, we decided, on a whim, to extend the day by half an hour to run our sweep-nets over a sparsely vegetated sandy and gravelly area that we had not surveyed before. It was a good decision, as within the same 10-metre square we collected specimens of two species presumed to be county firsts. One was *Nysius huttoni* F.B. White (Lygaeidae), which both Phil Ball and I swept off low herbage (my determination of the species was confirmed by Jim Flanagan). The other was *Rhopalus parumpunctatus* Schilling (Rhopalidae), swept off low herbage by Phil Ball (my determination of this species was confirmed by Tristan Bantock).

Further updates to the Atlas of the Hemiptera-Heteroptera of the British Isles

The same dataset that contained the *Graptopeltus lynceus* (Fabricius) record from 1925, described above, also contains four other species that need to be added to the *Atlas of the Hemiptera-Heteroptera of the British Isles* (Ryan, 2014a & 2014b): *Acompocoris alpinus* Reuter (Anthocoridae), based on a lone record from Royston (TL33) on 26 May 1917; *Cimex pipistrelli* Jenyns (Cimicidae), based on a lone record from Royston (TL33) in May 1920; *Fieberocapsus flaveolus* (Reuter) (Miridae), based on a lone record from Broxbourne (TL30) on 18 September 1909; *Loricula distinguenda* (Reuter) (Microphysidae), based on a lone record from Barnet (TQ29) in August 1885.

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SPECIES ACCOUNTS FOR THE HEMIPTERA-HETEROPTERA REPORTED AS NEW TO THE BRITISH ISLES SINCE SOUTHWOOD & LESTON (1959): 1970 TO 1979

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Introduction

This is the second instalment of species accounts which expand upon the addendum to Southwood & Leston (1959) (Ryan, 2012). The first instalment (Ryan, 2015c) covered the species announced as new to the British Isles in the period 1959 to 1969, which is here extended by another ten years to 1979. As before, the species accounts are based upon details published in the national entomological literature up to the present time.

The numbering of the species follows Ryan (2012), which places them within the taxonomic sequence of Southwood & Leston (1959). Details of identification are given, but figures from published articles are not reproduced. A full set of keys is provided by Nau (2012) and Kirby (2015). Images for the bugs may be found at the British Bugs website (www.britishbugs.org.uk) and elsewhere on the internet, such as Flickr (www.flickr.com). County distribution maps for the new species are given in Figure 1. References are not cited within the species accounts, to avoid cluttering the prose. The evidence base for the accounts is instead given in the annotated bibliography.

Species accounts

130C. Macroplax preyssleri (Fieber) (Lygaeidae)

This species was first reported from Britain in June 1968 by W. R. Dolling during a visit to Brean Down, Somerset, a locality where the rare plant White Rock-rose, *Helianthemum apenninum* (L.) Mill. (Cistaceae), is abundant. The insect was found at the roots of thyme and by sweeping low herbage. Later, it was found that M. G. Morris had also taken the animal at Dolebury Warran in the Mendips, Somerset, earlier that year on 25 May. On this occasion, the method of capture was vacuum sampling a steep, south-facing limestone hillside with abundant Common Rock-rose, *Helianthemum nummularium*. (L.) Mill.

The insect has subsequently been taken at several sites on the limestone of the Gloucestershire Cotswolds and the Gower Peninsula, Glamorgan; on steep slopes by sweeping, sieving moss and ground litter or searching under rock-rose. This plant is believed to be the host, and captures of adults have occurred in April, May, June and September, suggesting that the bug overwinters in this state.

The only other British members of the subfamily Oxycareninae are two species of *Metopoplax* Fieber. These insects are of a similar size, but *M. preyssleri* is broadened posteriorly and appears pear-shaped, whereas *Metopoplax* is more elongate and parallel-sided. Given the differences in anatomy and habitat, it is unlikely that the genera have been confused by recorders.

303A. *Tupiocoris rhododendri* (Dolling) (Miridae), formerly *Dicyphus rhododendri* Dolling and *Neodicyphus rhododendri* (Dolling)

This animal was reported as new to science by W. R. Dolling from adults taken in June, July and August 1971 from *Rhododendron* L. (Ericaceae) at Kew Gardens, Surrey and Silwood Park, Sunninghill, Berkshire. The insect was already widely distributed, with records quickly following for Bedfordshire, Hertfordshire, Buckinghamshire and Kent, all on the same plant.

Since then, the counties of Oxfordshire, Cornwall, Derbyshire and Shropshire have been added to its known distribution. The bug has been reported feeding on the aphid *Masonaphis* Hille Ris Lambers (Aphididae). The nymphs can be found in June.

The species is distinctive and is unlikely to be confused with any other on the British list. It differs from *Campyloneura virgula* (Herrich-Schäffer) (Miridae), with which it often occurs on *Rhododendron*, by its black pronotum and apex to the cuneus, which are both red in the latter species.

188A. Temnostethus tibialis Reuter (Anthocoridae)

The first British record for this species was reported by G. E. Woodroffe, from a single specimen found on the trunk of a fallen oak, *Quercus* sp. (Fagaceae), at Silwood Park, Sunninghill, Berkshire on 3 July 1964. A second specimen was taken by Woodroffe, beating oak in Pamber Forest, Hampshire on 25 June 1970. A third record was provided by A. A. Allen, taking a singleton from a sap run on the trunk of an oak at Oxleas Wood, Shooters Hill, Kent on 9 July 1986. No other field reports of this species have been published in the national entomological literature, although a specimen has been found in a museum collection, taken on 4 October 1929 from Celbridge, Kildare, Ireland.

The bug has a superficial similarity to *Temnostethus gracilis* Horváth, but can easily be separated from this species by examination of the rostrum. This reaches the hind coxae in the former and the mid-coxae in the latter. Although *T. pusillus* and *T. gracilis* have been confused in Britain in the past, it is very unlikely that there has been subsequent confusion with *T. tibialis*, that would cast doubt on records of the first two species, given the last's distinct anatomy and rarity.

203A. Orius laticollis (Reuter) (Anthocoridae)

In 1971 it was reported that during a visit to the British Museum (Natural History), Dr. Jean Péricart discovered that specimens standing in collections as *Orius minutus* (Linnaeus) were in fact *Orius vicinus* (Ribaut). G. E. Woodroffe subsequently found the same situation is his own collection, except there was an additional species present, *Orius laticollis* (Reuter). *O. vicinus* is mentioned in Southwood & Leston (1959), albeit as a foreign introduced species, but *O. laticollis* had not previously been recorded from the British Isles. Woodroffe's specimens of *O. laticollis* had been taken from Dungeness, Kent on 29 September 1958. Two more specimens were found in material from the late A. M. Massee, taken from Aylesford, Kent on 21 October 1956.

Subsequent recording has added a number of counties to the English distribution, which now extends as far west as Gloucestershire and as far north as Yorkshire. The insect has also been recorded from Ireland. It has been found on a variety of tree species, specifically poplar, *Populus* spp. (Salicaceae), willow, *Salix* Spp. (Salicaceae), ash, *Fraxinus* spp. (Oleaceae), and rowan, *Sorbus aucuparia* L. (Rosaceae); and adults have been taken in every month from May to October.

Given that *O. minutus* has been replaced in the British list by two different species, both of which have a widespread distribution, all records for *O. minutus* must be disregarded, unless supported by a specimen that can be identified. The separation of these two species is by examination of the male genitalia. In *O. vicinus* the spiralparamere has a broad conus and a short flagellum, whereas *O. laticollis* has a narrow conus and long flagellum.

276A. Atractotomus parvulus Reuter (Miridae), formerly Atractotomus mirificus Woodroffe

G. E. Woodroffe was the first to record this species in the British Isles, taking it beating pine, *Pinus* spp. (Pinaceae), on heathland near Thursley, Surrey on 11 July 1970. It was immediately apparent to him that this bug was distinct from the conifer inhabiting *Atractotomus magnicornis* (Fallén), due to its smaller and darker appearance, and the fact that the latter species had not been taken by him from pine.

A. parvulus has since been reported from the additional counties of Berkshire, Sussex, Hampshire, Essex, Bedfordshire and Oxfordshire. It has also been recorded from Scotland. The species has been found on pine and at light, in the months of July and August.

No confusion has been reported among specimens standing as *A. magnicornis* in collections, and presumably *A. parvulus* is sufficiently distinct so as not to cast doubt upon earlier records for the former. The identity of specimens can be confirmed by examination of the aedeagus. The secondary gonopore is at the apex in *A. magnicornis*, and remote from the apex in *A. parvulus*.

364A. Orthops basalis (A. Costa) (Miridae)

The first British record for this insect was by G. E, Woodroffe from Loch Davan, near Dinnet, Aberdeenshire on 25 August 1971, taken from Wild Angelica, *Angelica sylvestris* L. (Apiaceae), growing in a clearing in an alder carr beside the loch. A subsequent examination of the collections of the British Museum (Natural History) revealed several more specimens from English locations, in Herefordshire, Hertfordshire and Dorset, standing as *Orthops kalmii* (Linnaeus). Several specimens of *Orthops campestris* (Linnaeus) had also been misidentified.

Subsequent recording has added the counties of Shropshire, Worcestershire, Oxfordshire, Berkshire, Kent and Sussex; the months of May and September for the adult appearance; and Sea Holly, *Eryngium* spp. (Apiaceae), and Wild Carrot, *Daucus carota* L. (Apiaceae), as plants from which the insect has been taken. The bug also occurs in Ireland.

The three species of *Orthops* Fieber can be separated by examination of the male genitalia. The difference between *O. basalis* and *O. kalmii* is slight, but here the ratio of the length of the third antennal segment to the head width can be used. The segment is longer in the former than in the latter. Since the three species of *Orthops* have clearly been confused, old records should be considered doubtful, unless supported by an authenticated specimen.

415A. Notostira erratica (Linnaeus) (Miridae)

It was once thought that all *Notostira* Fieber in the British Isles were of this species, but Southwood & Leston (1959) pointed out that these were in fact *Notostira elongata* (Geoffroy). However, in 1977 G. E. Woodroffe reported that all Irish specimens are true *N. erratica*, and further that two British examples of this species had been found in the collections of the British Museum (Natural History) by W. R. Dolling, taken at Mildenhall, Wiltshire. There were no further British records until October 2013 when B. Nelson took a singleton in Oxfordshire. Subsequent field work by R. P. Ryan showed that the insect could be readily found, providing new county records for Berkshire, Buckinghamshire, Warwickshire, Gloucestershire and Northamptonshire.

The adult insect has been recorded in every month from June to October, and seems to prefer the grassy margins of roads, tracks and fields to open grassy areas.

The species can be distinguished from its congener by examination of the left paramere. Given that Southwood & Leston and Woodroffe concluded that the species was absent or rare in Britain, it is likely that the bug has only recently become common in this island, and old records can therefore be regarded as *N. elongata*. However, it is uncertain for how long the species has been overlooked.

286A. *Campylomma annulicorne* (Signoret) (Miridae), formerly *Campylomma annulicornis* (Signoret)

This species was first reported from Britain by B. S. Nau, having taken it from Osier, *Salix viminalis* L. (Salicaceae), at several sites in Bedfordshire in September 1978. Subsequently, it was reported that specimens had also been taken by A. A. Allen from Charlton, London (Kent) in July 1976 at light. Further records have added the counties of Hertfordshire, Gloucestershire and Oxfordshire to its known distribution.

The two British species of *Campylomma* Reuter can be distinguished by the length of the rostrum. In *Campylomma verbasci* (Meyer-Dür) it reaches the hind coxae, whereas in *C. annulicorne* it is shorter, reaching only the mid coxae.

290A. Placochilus seladonicus (Fallén) (Miridae)

B. S. Nau was the first to take this species in Britain, sweeping the animal from a filled sandpit, near Leighton Buzzard, Bedfordshire on 3 September 1977. Further specimens were taken in the following year from the same area, along a disused railway line and from an old chalk quarry.

The bug is associated with Field Scabious, *Knautia arvensis* (L.) Coult. (Dipsacaceae), where it grows in dry places. Further county records have been reported for Berkshire, Hertfordshire (along a lane verge), Oxfordshire (along a Chilterns farm track) and Sussex (on coastal chalk downland and by a roadside), adding the months of July and August to the adult appearance. The insect is usually taken from its host plant, but it has also come to light in a garden.

The insect is very distinctive and is unlikely to be confused with any other British species.

Annotated bibliography

130C. Macroplax preyssleri (Fieber) (Lygaeidae)

Dolling (1970). First record for Brean Down, Somerset, early June 1968, at roots of thyme and sweeping low herbage. The species' host plant is Common Rockrose, *Helianthemum chamaecistus*, but *Helianthemum apenninum*, White Rockrose, was much more common here. Another record at

- Dolebury Warran in the Mendips, Somerset, 25 May 1968 by Dr. M. G. Morris, vacuum sampling a steep, south-facing limestone hillside with abundant Common Rockrose.
- Askew (1985). Records for Rodborough Common, Gloucestershire Cotswolds, sweeping on 20 June 1983 & the cliffs east of Horton, Gower Peninsula searching under rockrose on 25 September 1983. Both sites were steep, south-facing, limestone slopes with plentiful Common Rock-rose.
- Alexander (1987). Record for Rodborough Common, Gloucestershire Cotswolds, 30 May 1986, swept from steep limestone pasture.
- Alexander (1989). Record for Daneway Banks, Cotswolds Hills, Gloucestershire, 28 June 1989, sieving moss and grass litter on a steep south-east facing bank. Common rock rose was plentiful, which is believed to be the host plant. Record for Radborough Common, Gloucestershire, 30 May 1985, swept from a south-west facing slope. Previous reports from Mendip limestone, so may be widespread on limestone in south-west Britain.
- Alexander (1998). Record for Swift's Hill, Gloucestershire, 20 April 1997.
- Gibbs (2000). Record for Goblin Combe, Somerset, 9 June 1999. Species is confined to Gloucestershire, Somerset and Glamorgan.
- Howe (2007). Associated with common rock-rose on coastal limestone grassland at Horton Cliffs and Overton Cliff on the south Gower coast, Wales.
- Widgery (2008). First record in 1983 at Rodborough Common, then in 1989 & 2003 at Daneway Banks (West Gloucestershire, VC34).
- 303A. *Tupiocoris rhododendri* (Dolling) (Miridae), formerly *Dicyphus rhododendri* Dolling and *Neodicyphus rhododendri* (Dolling)
- Dolling (1971). Species new to science. Records for Kew Gardens, Surrey (30 June, 3 July & 2 August 1971), Silwood Park, Berkshire (5, 7 & 27 July 1971), Aspley Heath, Bedfordshire, Harpenden, Hertfordshire & Slough, Buckinghamshire. All records from rhododendron. The species may be distinguished by the white collar and short curved claws. Seen feeding on the aphid *Masonaphis*. Nymphs appeared in June and the first adults in late June-early July, and lasted a month.
- Allen (1976). Record for Maryon Wilson Park, Charlton, Kent, 6 August 1974 on rhododendron.
- McGavin (1982). Species reassigned to *Neodicyphus* McGavin. Records of 5th instar nymphs for Silwood Park, Berkshire (3 July 1977) & 2nd/3rd instar (26 June 1977).
- Kirby (1983). Records for Markeaton Park (29 July 1981) and Darley Park (4 August 1981), Derby on rhododendron.
- Campbell (2004). Records for Watsonian Oxfordshire and Berkshire.
- Denton (2004). Record for Oswestry Old Racecourse, Shropshire, 26 July 2004. Adults abundant on *Rhododendron ponticum* in a garden.
- Budworth (2008). First county record in the 3rd week of July 2008 at Alfreton Park, Derbyshire.
- Campbell (2008). Records for Bagley Wood, Watsonian Berkshire, 1992 and Eynsham Hall Park, Watsonian Oxfordshire, 1985.
- Alexander (2011). Record from near Mylor, Cornwall (VC1), August 2010.

188A. Temnostethus tibialis Reuter (Anthocoridae)

- Woodroffe (1964). Record for Silwood Park, Sunninghill, Berkshire, 3 July 1964, from the trunk of a fallen oak. No other examples have been taken in 15 years of intensive collecting here.
- Woodroffe (1971c). Record for Pamber Forest, North Hampshire, 25 June 1970, beaten from an oak.
- O'Connor (1989). Record from a museum specimen standing as *T. pusillus*, Celbridge, Kildare, 4 October 1929.
- Allen (1990). Record for Oxleas Wood, Shooters Hill, West Kent, 9 July 1986, on a sap run on the trunk of an oak tree. Further checks on the tree produced no more specimens. The species can be distinguished from *T. gracilis* by the longer rostrum, reaching the hind coxae, rather than the midcoxae.

203A. Orius laticollis (Reuter) (Anthocoridae)

Woodroffe (1971a). Dr. Jean Péricart discovered that all specimens in the British Museum (Natural History) standing as *Orius minutus* were *O. vicinus*. Woodroffe found that the specimens of his

own collection standing as *O. minutus* comprised two species, *O. vicinus* and *O. laticollis*. The latter specimens had been taken from Dungeness, Kent on 29 September 1958. Two more specimens were found in material from the late A. M. Massee, taken from Aylesford, Kent on 21 October 1956. The two species are distinguished by the form of the spiralparamere. In *O. vicinus* the conus is broad and the flagellum is short, compared with *O. laticollis* which has a narrow conus and long flagellum.

Nau (1984a). Adds county records for Hampshire, Isle of Wight, Oxfordshire, Northamptonshire and Essex.

Alexander (2006). Record for Ashleworth Ham, Gloucestershire, 4 August 2002. Species associated with larger trees of poplar, willow and ash. Record for Debdene, Cotswold Hills, Gloucestershire, 17 June 2000.

Waring (2007). Record for Whipsnade Wild Animal Park, Dunstable, Bedfordshire, 7 May 2005 from rowan.

Dolling (2007). Record for Rotherham, South-west Yorkshire (VC 63), July 2006, on riverside willows.

Campbell (2008). Records for Sutton Courtenay, Watsonian Berkshire, 1992 and Cropedy, Watsonian Oxfordshire, 1984.

O'Connor & Nelson (2012). Report from Ireland.

276A. Atractotomus parvulus Reuter (Miridae), formerly Atractotomus mirificus Woodroffe

Woodroffe (1971b). First record beating pine on heathland near Thursley, Surrey, 11 July 1970. Immediately recognisable as distinct due to its smaller and darker appearance, compared with the other conifer-associated member of the genus, *A. magnicornis*, which Woodroffe had not taken on pine. More taken on a return visit two days later. The two species can be separated by examination of the aedeagus. The secondary gonopore is at the apex in *A. magnicornis*, and remote from the apex in *A. parvulus*.

Woodroffe (1974). Record for Ascot, Berkshire, 21 August 1974 at light.

Nau (1984b). Record for Essex on 25 August 1984.

Hodge (1985). Record for Ringmer, Lewes, Sussex, 1984, at light.

Lattin & Ozanne (1994). Record for Markway Enclosure, New Forest, Hampshire, 11 August 1986 on Scots Pine. *A. mirificus* Woodroffe is a synonym for *A. parvulus* Reuter.

Nau (1995). Reports that the species is widespread and common in Britain, occurring as far north as Easter Ross in Scotland. It is well established in Bedfordshire.

Campbell (2008). Records for Whitecross Green Wood, Oxfordshire (probably Watsonian Buckinghamshire), 1984 and Watsonian Oxfordshire.

364A. Orthops basalis (A. Costa) (Miridae)

Woodroffe (1971d). Repeat of record below.

Woodroffe (1973a). First British record from Loch Davan, near Dinnet, Aberdeenshire, 25 August 1971, in large numbers on *Angelica sylvestris* growing in a clearing in an alder carr beside the loch. The bugs were distinctive in their very dark appearance. The dark bug was also found elsewhere in Deeside, at Glen Tanar, Crathie Wood and Cambusomay. The collections of the British Museum (Natural History) were searched for the species. 34 specimens standing as *O. kalmii*, all but one from England, were found to include 11 *O. basalis* and 6 *O. campestris*. So, the species of *Orthops* have been confused. The only certain character for separation is the left paramere, but the difference between *O. kalmii* and *O. basalis* is slight. The ratio head-width:A3 could separate *O. basalis* from the others, but was not completely reliable for separating the other two species from each other. Numerous county records are presented for the three species, including the English counties of Herefordshire, Hertfordshire and Dorset for *O. basalis*.

Woodroffe (1973b). Record for roadside near Castletown, Caithness, late July/early August, on hogweed. The same dark form as above.

Campbell (2008). Records for Frilford, Watsonian Berkshire and Lambs Pool, Watsonian Oxfordshire, 1988.

Hodge (2013). Record for Brighton, East Sussex, 8 September 2012, swept off wild carrot, *Daucus carota*.

Whitehead (2006). Record for Little Comberton, Worcestershire on *Eryngium* in a garden.

O'Connor & Nelson (2012). Record for Ireland.

Greenslade (2013). Record for Kent.

Fowler (2014). Record for Halesfield, Telford, Shropshire in May.

415A. Notostira erratica (Linnaeus) (Miridae)

Woodroffe (1977). It was once thought that all *Notostira* Fieber in the British Isles were of this species, but Southwood & Leston (1959) pointed out that British insects were in fact *Notostira elongata* (Geoffroy). However, in 1977 G. E. Woodroffe reported finding that all Irish specimens are true *N. erratica*, and further that two British examples of this species had been found in the collections of the British Museum (Natural Histrory) by W. R. Dolling. These latter specimens were female, which are less easily identified than the males, from Mildenhall, Wiltshire. The only certain character for separating the two species is the shape of the left paramere.

Nelson (2014). Single male taken from Bald Hill, Oxfordshire Chilterns in October 2013.

Ryan (2015a). Records for Oxfordshire, Berkshire and Buckinghamshire. Capture of 71 specimens, on 24 June, 7 July, 24 August, 4, 6, 10, 17 & 18 September 2014. Clearly, the species is no longer rare in Britain. It is uncertain for how long it has been overlooked in this island.

Ryan (2015b). A search for specimens in a private collection found none among 52 male Notostira.

Ryan (2015d). Additional county records for Warwickshire, Gloucestershire and Northamptonshire in September 2015. Captured 69 specimens in the year, all from road/track verges and field margins, where it occurs as a much higher proportion of the *Notostira* catch than from open grassy areas.

286A. *Campylomma annulicorne* (Signoret) (Miridae), formerly *Campylomma annulicornis* (Signoret)

Nau (1978). First British record swept from a field near Potton, Bedfordshire, 3 September 1978. More records from the bank of a flooded gravel pit near Langford, Bedfordshire on 17 & 20 September 1978; and from the River Ivel at Broom, Bedfordshire, 20 September 1978. All records taken from *Salix viminalis*. The bug keys out as *C. verbasci* in Southwood & Leston (1979).

Allen (1984). Record for Charlton, London, SE7 (Kent) at light, July 1976.

Widgery (2006). Record for Hertfordshire on willows in 2005; and at Rye Meads in September 1979.

Campbell (2008), Record for Lower Windrush Gravel Pits, Watsonian Oxfordshire, 1985.

Widgery (2008). Reports four sites in Gloucestershire in 2007.

290A. Placochilus seladonicus (Fallén) (Miridae)

Nau (1978). First British record from a filled sandpit, near Leighton Buzzard, Bedfordshire, 3 September 1977, sweeping tall vegetation. Another record from an adjacent disused railway line, 8 September 1978; and several more specimens the following day found shaking Field Scabious over a tray. Also found 10km east in an old chalk quarry. The bug prefers dry places. The insect keys out to *Asciodema* in Southwood & Leston (1959).

Hawkins (1989). Record for Woodhouse Farm, Oxfordshire Chilterns, 9 August 1986, on Field Scabious beside a farm track.

Hodge (1990a). Record for Cow Gap, Beachy Head, East Sussex, 18 July 1989, in large numbers on Field Scabious on chalk downland. A return visit on 30 August 1989 found none.

Hodge (1990b). Repeat of above record.

Hodge (1991). Record for Beddingham, East Sussex, 17 July 1990, abundant on *Knautia arvensis* by a roadside.

Nau (1994). Record for Hexton, Hertfordshire, a lane verge near Pegsdon Hills on 11 July 1992.

Campbell (2008). Records for Buckland, Watsonian Berkshire, 1993 and Wood House Farm, Watsonian Oxfordshire, 1986.

Nau (2010). Record for Cockayne Hatley, Bedfordshire, 31st July 2009, at light in a garden.

Campbell (2011). Record for Watsonian Berkshire.

Nau (2013). Record for Pegsdon Common, Bedfordshire, 18 August 2012, on Field Scabious. It used to be found about 1km to the south, in a large coombe in Pegsdon Hills but grazing has eliminated the host-plant there.

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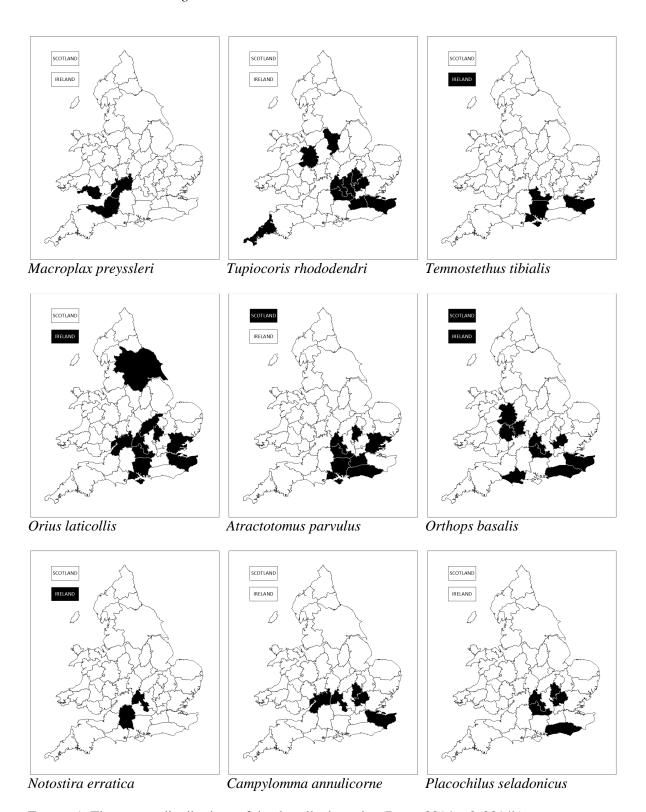


FIGURE 1. The county distributions of the described species (Ryan, 2014 a & 2014b).

NEW PLANT ASSOCIATIONS FOR *MEGACOELUM INFUSUM* (HERRICH-SCHAEFFER) (MIRIDAE) WITH COMMENTS ON ITS IDENTIFICATION

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There are two species of *Megacoelum* Fieber that occur in the British Isles: *Megacoelum infusum* (Herrich-Schaeffer) associated with oak, *Quercus* spp. (Fagaceae), and *Megacoelum beckeri* (Fieber) associated with pine, *Pinus* spp. (Pinaceae) (Southwood & Leston, 1959). These are very similar in general appearance, and Southwood & Leston separate them on the basis of the length and density of the hairs on the inner margins of the hind tibiae.

Unfortunately, in my own collecting, I have found this feature to be highly variable, and I could not confidently assign my specimens to species on this basis. So, I rather lazily relied on host plant association, identifying specimens based upon the species of tree from which they had been taken. However, I knew that if I ever took specimens where oak and pine were adjacent to each other, I would not be able to identify them beyond genus.

This situation became more unsatisfactory when I reared *Megacoelum* Fieber from a nymph taken on Lawson Cypress, *Chamaecyparis lawsoniana* (Murr.) Porlatore (Cupressaceae), in Abingdon Cemetery (National Grid Reference SU485976) on 12 August 2015. Five days later, I took another nymph on Lawson Cypress in Aylesbury Cemetery (SP829135) and then, the following day, several more nymphs, with adults, on the same host in the cemetery of Royal Leamington Spa (SP321642). Of which species were these bugs? Were they *M. infusum* straying from oak, or *M. beckeri* straying from pine?

Clearly, I had to improve my identification of this genus, and I consulted Wagner & Weber (1964). This text, like Southwood & Leston, separated *M. infusum* and *M. beckeri* on the basis of tibial hairs, but also figured the genitalia of the two species, showing clear differences. A dissection of the males in my collection of voucher specimens showed that they were all *M. infusum*, including one taken on pine. I was forced to conclude that host plant association was not a reliable method for separating the two species, and in particular that bugs taken on pine were not necessarily *M. beckeri*. It was also clear that I had no evidence of ever having encountered *M. beckeri*.

The records from my voucher specimens of *Megacoelum* are detailed below.

Beating pine on sandy heathland:-

Wildmoor Heath, Crowthorne, Berkshire (VC22): 15 August 2006 (SU845631), 1 ?; 23 August 2008 (SU845631), 1 ?. [Previously reported as *M. beckeri* (Ryan, 2014, *Hemipterist* 1: 36-37)]

Chobham Common, Chobham, Surrey (VC17): 15 August 2006 (SU968652), $1 \circlearrowleft + 2 \circlearrowleft \circlearrowleft ; 3$ August 2010 (SU976656), $1 \circlearrowleft .$

Witley Common, Witley, Surrey (VC17): 27 August 2010 (SU923400), 1♀.

Hankley Common, Rushmoor, Surrey (VC17): 31 August 2010 (SU880414), 1♀.

Beating oak in various situations:-

University Parks, Oxford, Oxfordshire (VC23): 16 August 2006 (SP516073), $1 \circlearrowleft + 6 \circlearrowleft \circlearrowleft$; 18 August 2006 (SP516073), $2 \circlearrowleft \circlearrowleft + 2 \circlearrowleft \circlearrowleft$; 14 September 2007 (SP519071), $1 \circlearrowleft$; 21 August 2015 (SP513072), $1 \circlearrowleft$.

New Marston Meadows, Oxford, Oxfordshire (VC23): 28 August 2014 (SP518080), 2♀♀.

Hitchcopse Pit, Dry Sandford, Watsonian Berkshire (VC22): 11 September 2007 (SU452996), 1° ; 15 August 2009 (SU453997), 2° ?

Moor Copse, near Pangbourne, Berkshire (VC22): 02 August 2009 (SU638739), 1♀.

Beating Lawson Cypress in cemeteries:-

Abingdon, Watsonian Berkshire (VC22): 12 August 2015 (SU485976), 1♀.

Aylesbury, Buckinghamshire (VC24): 17 August 2015 (SP829135), 1♀.

Royal Leaminton Spa, Warwickshire (VC38): 18 August 2015 (SP321642), $3 \stackrel{?}{\circ} \stackrel{?}{\circ} + 2 \stackrel{?}{\hookrightarrow} \stackrel{?}{\circ}$.

There is a report of *M. beckeri* occurring on conifers other than pine (Denton, 2011), but a literature search revealed that pine and Lawson Cypress are new plant associations for *M. infusum* in Britain. The presence of nymphs confirms Lawson Cypress as a host, but my male from pine was taken as an adult, so it is not clear whether *M. infusum* actually breeds on this plant.

I am most grateful to Dr Berend Aukema and Mr Bill Dolling for their helpful comments during my research on this subject.

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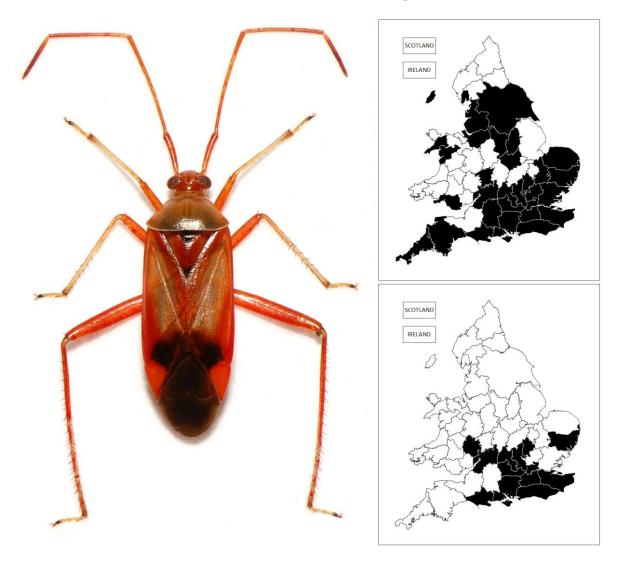


FIGURE 1. A female *Megacoelum* taken from oak (left) and the county distributions of *M. infusum* (top right) and *M. beckeri* (bottom right) (Ryan, 2014a & 2014b).

MUD SWEEPING UPDATE

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I recently described a novel method for the collection of shorebugs (Hemiptera: Saldidae), which I referred to as 'mud sweeping' (Ryan, 2015). This involves walking through muddy areas swinging a sweep net to and fro over the wet ground. Hundreds of saldids were taken in 2014 with this method, comprising mostly *Saldula saltatoria* (Linnaeus) with good numbers of *Saldula pallipes* (Fabricius). However, several dozen of the scarce *Saldula opacula* (Zetterstedt) were also found, across three sites in Oxfordshire, a species which had not previously been recorded from the county.

Naturally, I was keen to experiment further with this method in 2015. Alas, I had difficulty finding new muddy areas to study; the warm, dry spring and summer possibly being to blame. There were also problems sampling again my three successful sites from the previous year. The large muddy area on New Marston Meadows, Oxford, which was the result of spoil from the dredging of a ditch being dumped on the surrounding meadow, was now well vegetated. No saldids were swept here. The margin of the lake at Stanton Harcourt, was now dry and vegetated, the water level being much lower. The new shore consisted of gravel, not mud, and no saldids were found in my sweep net.

However, my third site from 2014, a lake near Stanton St John, outside Oxford, provided good sport. The water level was much lower than last year, and the muddy shore was covered by exposed aquatic vegetation. On 30 June, I took 180 saldids here by sweeping the margins of the lake, comprising 144 *S. saltatoria*, 17 *S. pallipes* and 19 *S. opacula*. Saldids were also found by lifting the vegetation and shaking it over my sweep net. Others were seen on the exposed bare mud.

This result confirms the record of *S. opacula* at the site, and for the county. Clearly, its capture in 2014 was not due solely to particular conditions which pertained that year. It is likely that the species has hitherto been overlooked in the county due to the difficulty in recording shore bugs using normal methods; and has only now become a member of the Oxfordshire list due to the application of the novel, and somewhat eccentric, method of mud sweeping.

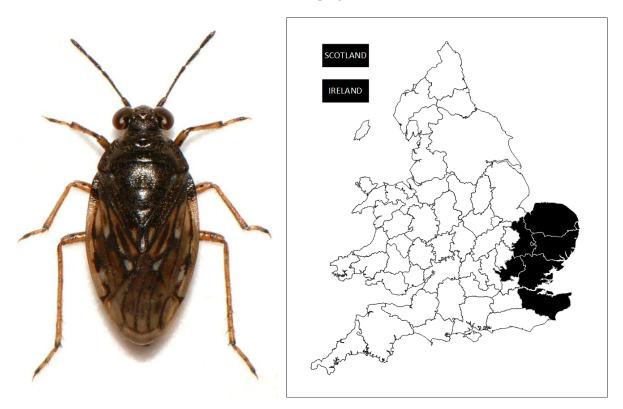


FIGURE 1. Saldula opacula and its county distribution (Ryan, 2014a & 2014b).



FIGURE 2. The upper lake of Stanton St John, near Oxford (30 June 2015).



FIGURE 3. The weedy margin of the upper lake, with some footprints from mud sweeping.

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SOME INTERESTING CAPTURES OF HEMIPTERA-HETEROPTERA FROM A TURKEY OAK, *QUERCUS CERRIS* L. (FAGACEAE), IN UNIVERSITY PARKS, OXFORD

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Following the recent report of two additions to the British list, *Psallus anaemicus* Seidenstucker and *Psallus helenae* Josifov, from Turkey Oak, *Quercus cerris* L. (Fagaceae), in Peterborough (Bantock, 2015 & Kirby, 2015), I decided to investigate this plant in Oxford. Several examples of Turkey Oak occur in University Parks, one of which, along West Walk (National Grid Reference SP513072), produced some interesting captures, which I detail below.

My collecting visits to this tree started on 28 May 2015, with regular returns, but initially produced only the common oak species. However, on 20 June, I took a number of unfamiliar *Psallus* Fieber. Most of the catch proved to be teneral, but fourteen of the males could be dissected satisfactorily for identification, and these were found to consist of eleven *P. anaemicus* and three *P. helenae*. My next visit, on 26 June, produced a much larger catch, consisting mostly of mature adults. These were easily sorted into four main forms. The males mostly divided into two groups, 79 of a larger and brighter form (*P. anaemicus*), and 40 of a smaller and duller form (*P. helenae*). The females were of an entirely different appearance, revealing a pronounced sexual dimorphism in the two species. 63 were larger and very pale ('anaemic', *P. anaemicus*), and 44 were smaller and pale, suffused with red (*P. helenae*).

Five unidentified specimens remained. Three pale males were found upon dissection to be *P. anaemicus* infected with parasites. Two females were identified as *Psallus lucanicus* Wagner, from photographs sent to Dr Bernard Nau. He had already taken a male of this species in Bedfordshire, which has not previously been recorded from the British Isles. He will be publishing a full account of this new species in due course.

Examples of the forms mentioned above are shown in Figures 1, 2 & 3. *P. anaemicus* and *P. helenae* were still abundant on their host tree when I returned on 12 July. Elsewhere, I beat a singleton of *P. helenae* from a Turkey Oak at The Chase, Broad Layings, Watsonian North Hampshire (SU443629) on 17 July (Ryan, 2016).

The above records suggest that the new Turkey Oak species are already widespread in southern England, and it will be interesting to see, as more records are published, how far west and north their distributions extend within the British Isles

I am most grateful to Dr. Bernard Nau for his assistance.

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FIGURE 1. Psallus anaemicus male (left) and female (right).



FIGURE 2. Psallus helenae male (left) and female (right).



FIGURE 3. Parasitised *Psallus anaemicus* male (left) and *Psallus lucanicus* female (right).

NABIS PSEUDOFERUS REMANE (HEMIPTERA: NABIDAE) DELETED FROM THE OXFORDSHIRE LIST

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I recently added this species to the Oxfordshire list based upon a single specimen taken sweeping a wet meadow (Ryan, 2014a). Having since undertaken more collecting of the damselbugs (Nabidae), I no longer believe that this specimen is sufficiently distinct from those of *Nabis ferus* (Linnaeus) in my collection. Consequently, I must delete this species from the Oxfordshire list (Ryan 2014b & 2014c), pending confirmation by more captures.

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SALDULA OPACULA (ZETTERSTEDT) (HEMIPTERA: SALDIDAE) NEW TO LINCOLNSHIRE

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Further to the recent addition of this species to the county list for Oxfordshire (Ryan, 2016), we wish to report the insect as new to Lincolnshire.

On 20/6/2014 we recorded 2 *Saldula opacula* in two locations of Willow Tree Fen, near Spalding, South Lincolnshire (VC53). The first was in a flooded field (Location 13 Field behind farm at grid ref TF175219) that had started to dry up at the edges with patches of mud and submerged grass and sedges. The second was on the edge of a flooded mere (Location 15 Mere Field at TF1758121521) with wet mud, sedges and reed edges.

We returned on 17/8/2014 and recorded another 3 also on the edge of the flooded mere in the same habitat. This time we took a photograph of the area and also managed to see them on the bare mud springing onto the water when they were disturbed. Using a pond net we then swept through the water to capture them. The records were later identified and confirmed by Richard Chadd.



FIGURE 1. Willow Tree Fen Mere (Photo: Graham Warnes)

Willow Tree Fen was purchased by Lincolnshire Wildlife Trust in 2009 as arable farmland and is currently being transformed into more traditional Lincolnshire fenland.

4/5 years on Richard Chadd had asked us to undertake an Aquatic Invertebrate Survey comprising of 1 visit in 2013 and 4 visits in 2014 to see how the site had changed over time. Across the site, 107 aquatic invertebrate species were recorded including 21 water bug species and another first for Lincolnshire the water beetle *Hygrotus decoratus*. This site is now a great fenland habitat of ditches, flooded meadows, grazing pasture, reedbeds and shallow meres.

Reference

Ryan, R. P. 2016. Mud-sweeping update. Hemipterist 3: 68-70.

THE DIVISION OF RYAN'S LIST OF HEMIPTERA-HETEROPTERA FOR LINCOLNSHIRE INTO VICE-COUNTY LISTS FOR VC53 AND VC54

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Introduction

The list of Hemiptera-Heteroptera for Lincolnshire in Ryan (2014) was compiled from that of Massee (1955) with additional records from the national entomological literature published in the six decades between these two papers. Ryan did not consider local publications, in particular the *Transactions of the Lincolnshire Naturalists' Union*; and did not attempt to divide the list for Lincolnshire into separate lists for its constituent vice-counties, which are the basis of modern recording. The present paper addresses these shortcomings, adding new county records and dividing the county list into separate lists for Watsonian South Lincolnshire (VC53) and Watsonian North Lincolnshire (VC54).

The vice-county records were interpreted by taking into account the name changes and confusions over identity documented in Ryan (2012, 2013, 2014, 2015, 2016a & 2016b). The resulting vice-county lists include 566 records, compared with 207 for the original Lincolnshire list. The list for Lincolnshire as a whole has lengthened by 142, the increase arising from 146 species added to the list and four deleted from it due to the known records being insufficiently precise to be allocated to a particular vice-county.

The lists for the two vice-counties, which will appear in the next edition of the county distribution, are presented below. The species that are new to Ryan's list for Lincolnshire are marked "[NEW]", and the deleted species are marked "[DELETED]". The numbers in brackets marking some of the records relate to the references from which they were derived, as indicated in Table 1. The unmarked records are from Kirby (1988). Details of the records marked "A" are given in Appendix A, these being from a dataset provided by Colin Smith. Those marked "B" derive from a dataset supplied by Richard Chadd, details of which are given in Appendix B. I am most grateful to Colin and Richard for supplying these records and for their permission to publish those new to the vice-county lists. Thanks are also due to Allan Binding and Charlie Barnes for their help in the research for this paper.

The divided records

ARADIDAE Aradus depressus (Fabricius) Aneurus laevis (Fabricius) [NEW]	VC53 (A) VC53	VC54 VC54
ACANTHOSOMATIDAE		
Acanthosoma haemorrhoidale (Linnaeus)	VC53 (A)	VC54
Cyphostethus tristriatus (Fabricius) [NEW]	VC53 (A)	VC54 (A)
Elasmostethus interstinctus (Linnaeus)	VC53 (A)	VC54 (A)
Elasmucha grisea (Linnaeus)	VC53 (A)	VC54 (A)
Cydnidae		
Legnotus limbosus (Geoffroy) [NEW]	VC53	VC54 (A)
Legnotus picipes (Fallén)	-	VC54
Sehirus luctuosus Mulsant & Rey	VC53 (A)	VC54
Tritomegas bicolor (Linnaeus) [NEW]	VC53	VC54 (A)
THYREOCORIDAE		
Thyreocoris scarabaeoides (Linnaeus) [NEW]	-	VC54 (A)

PENTATOMIDAE		
Aelia acuminata (Linnaeus)	VC53 (A)	VC54 (11)
Dolycoris baccarum (Linnaeus)	VC53 (9)	VC54 (4)
Eysarcoris venustissimus (Schrank)	VC53 (A)	VC54 (A)
Neottiglossa pusilla (Gmelin) [NEW]	VC53 (A)	VC54 (A)
Palomena prasina (Linnaeus)	VC53 (A)	VC54
Pentatoma rufipes (Linnaeus)	VC53 (A)	VC54 (3)
Picromerus bidens (Linnaeus) [NEW]	VC53 (A)	VC54
Piezodorus lituratus (Fabricius) [NEW]	VC53 (A)	VC54
Podops inunctus (Fabricius) [NEW]	VC53	VC54 (A)
Rhacognathus punctatus (Linnaeus) [NEW]	_	VC54
Troilus luridus (Fabricius) [NEW]	VC53 (A)	VC54
Zicrona caerulea (Linnaeus)	VC53 (A)	VC54
	, , ,	
Coreidae		
Ceraleptus lividus Stein [NEW]	VC53 (17)	-
Coreus marginatus (Linnaeus)	VC53 (15)	-
Coriomeris denticulatus (Scopoli)	VC53	VC54
Leptoglossus occidentalis Heidemann [NEW]	VC53 (A)	VC54 (A)
Syromastus rhombeus (Linnaeus) [NEW]	-	VC54
RHOPALIDAE	NGS	11054 (1)
Chorosoma schillingii (Schilling)	VC53	VC54 (A)
Corizus hyoscyami (Linnaeus) [NEW]	VC53 (A)	VC54 (A)
Myrmus miriformis (Fallén)	VC53 (A)	VC54
Rhopalus parumpunctatus Schilling [NEW]	-	VC54 (A)
Rhopalus subrufus (Gmelin) [NEW]	VC53 (A)	VC54 (A)
Stictopleurus punctatonervosus (Goeze) [NEW]	VC53 (A)	VC54 (A)
Lygaeidae		
Acompus rufipes (Wolff) [NEW]	_	VC54
Acompus rujipes (Wolff) [NEW] Aphanus rolandri (Linnaeus)	VC53 (12)	-
Chilacis typhae (Perris) [NEW]	VC53 (12) VC53 (A)	VC54
Cymus claviculus (Fallén) [NEW]	VC53 (A)	VC54 (A)
Cymus glandicolor Hahn [NEW]	VC53 (11) VC53	VC54 (A)
Cymus melanocephalus Fieber [NEW]	VC53 (A)	VC54 (A)
Drymus brunneus (R.F. Sahlberg)	VC53 (A) VC53 (A)	VC54 VC54
Drymus brunneus (R.F. Samberg) Drymus latus Douglas & Scott [NEW]	VC33 (A)	VC54 (A)
Drymus ryeii Douglas & Scott [NEW] Drymus ryeii Douglas & Scott	-	VC54 (A) VC54 (3)
Drymus ryeu Bouglas & Scott Drymus sylvaticus (Fabricius)	VC53 (A)	VC54 (3) VC54 (A)
Eremocoris podagricus (Fabricius) [NEW]	VC53 (A) VC53 (A)	VC34 (A)
Gastrodes abietum Bergroth [NEW]	VC53 (A) VC53 (1)	-
Gastrodes grossipes (De Geer)	VC53 (1) VC53 (A)	VC54
Heterogaster urticae (Fabricius) [NEW]		VC54 VC54
, , , , ,	VC53 (A)	
Ischnodemus sabuleti (Fallén) [NEW]	VC53	VC54 (A)
Kleidocerys ericae (Horváth)	- VICE2 (A)	VC54
Kleidocerys resedae (Panzer)	VC53 (A)	VC54
Macrodema microptera (Curtis)	-	VC54
Megalonotus antennatus (Schilling) [NEW]	- VICE2 (A)	VC54 (A)
Megalonotus chiragra (Fabricius) [NEW]	VC53 (A)	VC54 (A)
Megalonotus dilatatus (Herrich-Schaeffer) [NEW]	- VIC52 (A)	VC54 (A)
Megalonotus emarginatus (Rey) [NEW]	VC53 (A)	-
Megalonotus sabulicola (Thomson) [NEW]	VC53 (A)	- VICEA (A)
Metopoplax ditomoides (A. Costa) [NEW]	- VC52	VC54 (A)
Nysius ericae (Schilling) [NEW]	VC53	VC54 (1)

Lygaeidae (Continued)		
Nysius senecionis (Schilling) [NEW]	VC53 (A)	VC54 (A)
Nysius thymi (Wolff) [NEW]	VC53 (A)	VC54
Orsillus depressus (Mulsant & Rey) [NEW]	VC53 (A)	-
Ortholomus punctipennis (Herrich-Schaeffer)	-	VC54
Peritrechus geniculatus (Hahn) [NEW]	VC53 (A)	VC54
Peritrechus lundii (Gmelin)	VC53 (A)	VC54
Peritrechus nubilus (Fallén) [NEW]	-	VC54 (A)
Plinthisus brevipennis (Latreille) [NEW]	_	VC54
Scolopostethus affinis (Schilling)	VC53 (A)	VC54 (3)
Scolopostethus decoratus (Hahn)	VC53 (A)	VC54 (A)
Scolopostethus grandis Horváth	VC53	-
Scolopostethus thomsoni Reuter	VC53 (A)	VC54
Stygnocoris fuligineus (Geoffroy)	VC53 (A)	VC54 (A)
Stygnocoris rusticus (Fallén)	VC53 (A)	VC54
Stygnocoris sabulosus (Schilling)	-	VC54 (3)
Taphropeltus contractus (Herrich-Schaeffer) [NEW]	VC53 (A)	VC54 (A)
Trapezonotus arenarius (Linnaeus)	-	VC54
Trapezonotus desertus Seidenstücker [NEW]	VC53	VC54 (A)
Trapezonotus dispar Stål [NEW]	-	VC54
Trapeconomis ansper star [11211]		, 65 .
BERYTIDAE		
Berytinus clavipes (Fabricius) [NEW]	VC53	-
Berytinus minor (Herrich-Schaeffer) [NEW]	VC53	VC54
Berytinus montivagus (Meyer-Dür) [NEW]	VC53	-
Berytinus signoreti (Fieber)	_	VC54
Gampsocoris punctipes (Germar)	_	VC54
Metatropis rufescens (Herrich-Schaeffer) [NEW]	-	VC54 (A)
_		
PIESMATIDAE		11054
Parapiesma quadratum (Fieber) [NEW]	-	VC54
Piesma maculatum (Laporte)	VC53	VC54
TINGIDAE		
Acalypta carinata (Panzer)	VC53	_
Acalypta parvula (Fallén)	VC53 (A)	VC54 (3)
Agramma laetum (Fallén) [NEW]	VC53 (11)	VC54 (3)
Campylosteira verna (Fallén) [NEW]	-	VC54
Derephysia foliacea (Fallén)	VC53	VC54
Dictyla convergens (Herrich-Schaeffer) [NEW]	VC53 (A)	VC54
Dictyonota fuliginosa A. Costa [NEW]	-	VC54 (A)
Dietyonola filliginosa 11. Costa [11211]		
Dictyonota strichnocera Fieber [NFW]	VC53	` '
Dictyonota strichnocera Fieber [NEW] Kalama tricornis (Schrank)	VC53	VC54
Kalama tricornis (Schrank)	-	VC54 VC54
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer)	VC53 - VC53	VC54
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED]	- VC53 -	VC54 VC54 VC54
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED] Tingis ampliata (Herrich-Schaeffer)	- VC53 - VC53 (A)	VC54 VC54 VC54 - VC54
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED]	- VC53 -	VC54 VC54 VC54
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED] Tingis ampliata (Herrich-Schaeffer)	- VC53 - VC53 (A)	VC54 VC54 VC54 - VC54
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED] Tingis ampliata (Herrich-Schaeffer) Tingis cardui (Linnaeus)	- VC53 - VC53 (A)	VC54 VC54 VC54 - VC54
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED] Tingis ampliata (Herrich-Schaeffer) Tingis cardui (Linnaeus) REDUVIIDAE	- VC53 - VC53 (A)	VC54 VC54 VC54 - VC54 VC54 (A)
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED] Tingis ampliata (Herrich-Schaeffer) Tingis cardui (Linnaeus) REDUVIIDAE Coranus woodroffei P.V. Putshkov [NEW]	- VC53 - VC53 (A) VC53 (A)	VC54 VC54 VC54 - VC54 VC54 (A)
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED] Tingis ampliata (Herrich-Schaeffer) Tingis cardui (Linnaeus) REDUVIIDAE Coranus woodroffei P.V. Putshkov [NEW] Empicoris baerensprungi (Dohrn) [NEW]	- VC53 - VC53 (A) VC53 (A)	VC54 VC54 VC54 - VC54 VC54 (A)
Kalama tricornis (Schrank) Physatocheila dumetorum (Herrich-Schaeffer) Stephanitis rhododrendri Horváth [DELETED] Tingis ampliata (Herrich-Schaeffer) Tingis cardui (Linnaeus) REDUVIIDAE Coranus woodroffei P.V. Putshkov [NEW] Empicoris baerensprungi (Dohrn) [NEW] Empicoris culiciformis (De Geer) [NEW]	- VC53 (A) VC53 (A) VC53 (A) - VC53 (A)	VC54 VC54 VC54 - VC54 (A) VC54 - VC54 (A)

Nabidae		
Himacerus apterus (Fabricius)	VC53 (A)	VC54
Himacerus boops (Schiødte) [NEW]	-	VC54
Himacerus major (A. Costa)	VC53	VC54
Himacerus mirmicoides (O. Costa)	VC53	VC54
Nabis ericetorum Scholtz [NEW]	-	VC54
Nabis ferus (Linnaeus)	VC53 (A)	VC54 (3)
Nabis flavomarginatus Scholtz	VC53	VC54
Nabis limbatus Dahlbom	VC53 (A)	VC54 (A)
Nabis lineatus Dahlbom	-	VC54
Nabis pseudoferus Remane [NEW]	VC53 (A)	-
Nabis rugosus (Linnaeus)	VC53	VC54
ANTHOCORIDAE		
Acompocoris alpinus Reuter [NEW]	-	VC54 (A)
Acompocoris pygmaeus (Fallén)	-	VC54
Anthocoris confusus Reuter	VC53 (A)	VC54
Anthocoris limbatus Fieber [NEW]	-	VC54 (A)
Anthocoris nemoralis (Fabricius)	VC53 (A)	VC54 (3)
Anthocoris nemorum (Linnaeus)	VC53 (A)	VC54 (3)
Anthocoris pilosus (Jakovlev) [NEW]	-	VC54 (A)
Anthocoris sarothamni Douglas & Scott	-	VC54
Anthocoris simulans Reuter [NEW]	VC53	-
Buchananiella continua (F.B. White)	VC53 (13)	VC54 (A)
Cardiastethus fasciiventris (Garbiglietti) [NEW]	-	VC54 (A)
Dufouriellus ater (Dufour)	VC53	VC54 (14)
Lyctocoris campestris (Fabricius)	-	VC54
Orius laevigatus (Fieber) [NEW]	VC53	VC54 (A)
Orius laticollis (Reuter) [NEW]	VC53	VC54 (A)
Orius majusculus (Reuter)	VC53 (A)	VC54
Orius niger (Wolff) [NEW]	VC53	VC54 (A)
Orius vicinus (Ribaut) [NEW]	VC53	VC54 (A)
Temnostethus gracilis Horváth [NEW]	-	VC54 (A)
Temnostethus pusillus (Herrich-Schaeffer) [NEW]	VC53 (A)	-
Tetraphleps bicuspis (Herrich-Schaeffer)	VC53 (A)	VC54 (3)
Xylocoris cursitans (Fallén)	VC53	VC54
CIMICIDAE		***
Cimex columbarius Jenyns	-	VC54
Cimex lectularius Linnaeus	VC53 (A)	VC54 (3)
Oeciacus hirundinis (Lamarck)	VC53 (8)	-
MICROPHYSIDAE		
Loricula coleoptrata (Fallén)	_	VC54
Loricula elegantula (Baerensprung)	VC53 (A)	VC54
Loricula pselaphiformis Curtis	-	VC54
Manager		
MIRIDAE	*******	***
Acetropis gimmerthalii (Flor) [NEW]	VC53 (A)	VC54
Adelphocoris lineolatus (Goeze)	VC53 (A)	VC54 (3)
Alloeotomus gothicus (Fallén) [NEW]	VC53	VC54 (A)
Amblytylus nasutus (Kirschbaum) [NEW]	VC53	VC54 (A)
Apolygus lucorum (Meyer-Dür) [NEW]	VC53 (A)	VC54
Apolygus spinolae (Meyer-Dür) [NEW]	VC53	VC54 (A)
Asciodema obsoleta (Fieber)	VC53 (A)	VC54

MIRIDAE (CONTINUED)		
Atractotomus magnicornis (Fallén)	_	VC54
Atractotomus mali (Meyer-Dür) [NEW]	VC53	VC54 (A)
Atractotomus parvulus Reuter [NEW]	VC53 (A)	V C 34 (A)
Blepharidopterus angulatus (Fallén)	VC53 (A)	VC54 (3)
Blepharidopterus diaphanus (Kirschbaum)	V C33 (11)	VC54 (3)
Bryocoris pteridis (Fallén)	VC53 (A)	VC54
Calocoris alpestris (Meyer-Dür) [NEW]	VC53 (A) VC53 (1)	-
Calocoris roseomaculatus (De Geer)	VC53 (1) VC53 (A)	VC54
Camptozygum aequale (Villers) [NEW]	VC53 (A) VC53	VC54
Campyloneura virgula (Herrich-Schaeffer)	VC53 (A)	VC54 VC54
Capsodes gothicus (Linnaeus) [NEW]	VC33 (A)	VC54 (A)
Capsus ater (Linnaeus)	VC53 (A)	VC54 (A) VC54 (3)
Capsus wagneri (Remane)	VC53 (A) VC53 (1)	-
Chlamydatus pullus (Reuter) [NEW]	VC53 (1) VC53	VC54 (A)
Chlamydatus saltitans (Fallén) [NEW]	VC53	VC34 (A)
Closterotomus fulvomaculatus (De Geer) [NEW]	VC53 (A)	VC54 (A)
Closterotomus norwegicus (Gmelin)	VC53 (A)	VC54 (A) VC54 (3)
Compsidolon salicellum (Herrich-Schaeffer)	VC53 (A)	VC54 (3) VC54 (A)
Conostethus griseus Douglas & Scott	VC53 (A) VC53	VC54 (A) VC54 (6)
Conostethus venustus (Fieber)	VC33	VC54 (0) VC54 (A)
Cyllecoris histrionius (Linnaeus)	VC53 (A)	VC54 (A) VC54 (3)
	VC33 (A)	VC54 (3) VC54
Cyrtorhinus caricis (Fallén) Deraeocoris flavilinea (A. Costa) [NEW]	VC53 (A)	VC54 (A)
· · · · · · · · · · · · · · · · · · ·	VC53 (A) VC53 (A)	VC54 (A) VC54
Deraeocoris lutescens (Schilling) [NEW]	VC33 (A)	
Deraeocoris olivaceus (Fabricius) [NEW]	- VC53	VC54 (A) VC54 (A)
Deraeocoris ruber (Linnaeus)		VC34 (A)
Dichrooscytus gustavi Josifov [NEW]	VC53 (A)	VC54
Dichrooscytus rufipennis (Fallén)	-	VC54 VC54
Dicyphus constrictus (Boheman) Dicyphus epilobii Reuter	- VC53 (A)	VC54 (A)
Dicyphus epitobii Reutei Dicyphus errans (Wolff) [NEW]	VC53 (A) VC53 (A)	VC54 (A) VC54 (A)
**	VC33 (A)	VC54 (A) VC54 (3)
Dicyphus globulifer (Fallén)	VC53 (A)	VC54 (3) VC54 (A)
Dicyphus stachydis J. Sahlberg Dryophilocoris flavoquadrimaculatus (De Geer)	VC53 (A) VC53 (A)	VC54 (A) VC54 (A)
Europiella artemisiae (Becker) [NEW]	VC53 (A) VC53 (A)	VC34 (A)
. , , = =	VC33 (A)	VC54
Fieberocapsus flaveolus (Reuter) [NEW] Globiceps flavomaculatus (Fabricius)	-	VC54 VC54
• •	-	VC34
Globiceps fulvicollis Jakovlev [DELETED] Globiceps juniperi Reuter [NEW]	-	- VC54
Grypocoris stysi (Wagner)	- VC53 (A)	VC54 VC54
Harpocera thoracica (Fallén)	VC53 (A) VC53 (A)	VC54 VC54 (2)
· · · · · · · · · · · · · · · · · · ·	VC33 (A)	VC54 (2) VC54 (A)
Heterocordylus tibialis (Hahn) [NEW] Heterotoma planicornis (Pallas)	- VC53 (A)	VC54 (A) VC54 (3)
Hoplomachus thunbergii (Fallén) [NEW]	VC53 (A) VC53	VC54 (3) VC54
	VC53 (A)	VC54 VC54 (A)
Leptopterna dolabrata (Linnaeus)		VC54 (A) VC54 (3)
Leptopterna ferrugata (Fallén)	VC53 (A)	
Liocoris tripustulatus (Fabricius)	VC53 (A)	VC54 (3)
Lopus decolor (Fallén) [NEW]	VC53 (A) VC53 (A)	VC54 VC54
Lygocoris pabulinus (Linnaeus)	VC33 (A)	
Lygocoris rugicollis (Fallén)	-	VC54 (3)
Lygus maritimus Wagner [NEW]	- VC53 (A)	VC54 (A)
Lygus pratensis (Linnaeus) [NEW]		VC54 (A)
Lygus rugulipennis Poppius [NEW]	VC53 (A) VC53	VC54 (A)
Lygus wagneri Remane [NEW]	v C33	VC54 (A)

MIRIDAE (CONTINUED)		
Macrolophus pygmaeus (Rambur) [NEW]	VC53	VC54 (A)
Macrolophus rubi Woodroffe [NEW]	VC53 (A)	-
Macrotylus paykullii (Fallén) [NEW]	-	VC54 (A)
Macrotylus solitarius (Meyer-Dür) [NEW]	VC53	VC54 (A)
Malacocoris chlorizans (Panzer)	VC53 (A)	VC54 (3)
Mecomma ambulans (Fallén)	VC53 (A)	VC54 (4)
Mecomma dispar (Boheman)	-	VC54
Megacoelum infusum (Herrich-Schaeffer) [NEW]	VC53 (A)	-
Megaloceroea recticornis (Geoffroy)	VC53	VC54
Megalocoleus molliculus (Fallén) [NEW]	VC53	VC54 (A)
Megalocoleus tanaceti (Fallén) [NEW]	VC53	-
Miris striatus (Linnaeus)	VC53 (A)	VC54
Monalocoris filicis (Linnaeus)	VC53	VC54
Neolygus contaminatus (Fallén)	VC53 (A)	VC54 (3)
Neolygus populi (Leston) [NEW]	VC53 (A)	-
Neolygus viridis (Fallén) [NEW]	-	VC54
Notostira elongata (Geoffroy)	VC53 (A)	VC54 (3)
Oncotylus viridiflavus (Goeze) [NEW]	VC53 (A)	VC54 (A)
Orthocephalus saltator (Hahn)	-	VC54
Orthonotus rufifrons (Fallén)	VC53 (A)	VC54
Orthops basalis (A. Costa) [NEW]	VC53 (A)	VC54 (A)
Orthops campestris (Linnaeus) [NEW]	VC53 (A)	VC54 (A)
Orthops kalmii (Linnaeus) [NEW]	VC53 (A)	VC54 (A)
Orthotylus adenocarpi (Perris) [NEW]	-	VC54 (A)
Orthotylus bilineatus (Fallén)	-	VC54
Orthotylus ericetorum (Fallén) [NEW]	-	VC54
Orthotylus flavinervis (Kirschbaum) [NEW]	VC53 (A)	-
Orthotylus flavosparsus (C.R. Sahlberg) [NEW]	VC53	VC54 (A)
Orthotylus marginalis Reuter	VC53 (A)	VC54 (A)
Orthotylus moncreaffi (Douglas & Scott) [NEW]	VC53	VC54 (A)
Orthotylus nassatus (Fabricius)	VC53 (A)	VC54
Orthotylus ochrotrichus Fieber [NEW]	VC53 (A)	VC54
Orthotylus prasinus (Fallén) [NEW]	VC53 (A)	VC54
Orthotylus tenellus (Fallén)	VC53 (A)	VC54
Orthotylus virescens (Douglas & Scott) [NEW]	VC53 (A)	VC54 (A)
Pantilius tunicatus (Fabricius)	VC53	VC54
Phoenicocoris obscurellus (Fallén)	VC53 (A)	VC54
Phylus coryli (Linnaeus)	VC53 (A)	VC54
Phylus melanocephalus (Linnaeus)	VC53 (A)	VC54
Phytocoris dimidiatus Kirschbaum [NEW]	VC53	VC54 (A)
Phytocoris longipennis Flor	VC53 (A)	VC54
Phytocoris pini Kirschbaum	-	VC54
Phytocoris populi (Linnaeus)	-	VC54
Phytocoris reuteri Saunders	-	VC54
Phytocoris tiliae (Fabricius)	VC53 (A)	VC54
Phytocoris ulmi (Linnaeus)	VC53 (A)	VC54 (3)
Phytocoris varipes Boheman	VC53 (A)	VC54 (A)
Pilophorus cinnamopterus (Kirschbaum) [NEW]	VC53	-
Pilophorus perplexus Douglas & Scott [NEW]	VC53 (A)	-
Pinalitus cervinus (Herrich-Schaeffer)	VC53 (A)	VC54
Pithanus maerkelii (Herrich-Schaeffer)	VC53 (A)	VC54
Placochilus seladonicus (Fallén) [NEW]	- VIC52 (A)	VC54 (A)
Plagiognathus arbustorum (Fabricius)	VC53 (A)	VC54 (3)
Plagiognathus chrysanthemi (Wolff)	VC53 (A)	VC54 (3)

MIRIDAE (CONTINUED)		
Platycranus bicolor (Douglas & Scott)	VC53 (A)	VC54
Plesiodema pinetella (Zetterstedt) [NEW]	-	VC54 (A)
Polymerus nigrita (Fallén) [NEW]	VC53	VC54 (A)
Polymerus unifasciatus (Fabricius) [NEW]	_	VC54 (A)
Psallodema fieberi (Fieber)	_	VC54
Psallus ambiguus (Fallén)	VC53 (A)	VC54 (3)
Psallus confusus Rieger [NEW]	VC53 (A)	VC54 (A)
Psallus falleni Reuter	-	VC54
Psallus flavellus Stichel [NEW]	_	VC54 (A)
Psallus haematodes (Gmelin)	VC53 (A)	VC54
Psallus lepidus Fieber	VC53	VC54
Psallus perrisi (Mulsant & Rey) [NEW]	VC53	VC54 (A)
Psallus salicis (Kirschbaum) [NEW]	VC53	VC54
Psallus variabilis (Fallén) [NEW]	-	VC54 (A)
Psallus varians (Herrich-Schaeffer)	VC53 (A)	VC54 (3)
Pseudoloxops coccineus (Meyer-Dür) [NEW]	VC53	VC54 (A)
Rhabdomiris striatellus (Fabricius)	VC53 (A)	VC54
Salicarus roseri (Herrich-Schaeffer)	VC53 (12)	-
Stenodema calcarata (Fallén)	VC53 (A)	VC54 (3)
Stenodema holsata (Fabricius)	-	VC54
Stenodema laevigata (Linnaeus)	VC53 (A)	VC54 (3)
Stenodema trispinosa Reuter [NEW]	-	VC54
Stenotus binotatus (Fabricius)	VC53 (A)	VC54
Sthenarus rotermundi (Scholtz) [NEW]	VC53 (A)	VC54
Systellonotus triguttatus (Linnaeus) [DELETED]	-	-
Teratocoris saundersi Douglas & Scott	_	VC54
Teratocoris viridis Douglas & Scott [DELETED]	_	-
Trigonotylus caelestialium (Kirkaldy) [NEW]	VC53 (A)	VC54 (A)
Trigonotylus psammaecolor Reuter	-	VC54
Trigonotylus ruficornis (Geoffroy) [NEW]	_	VC54 (A)
Tupiocoris rhododendri (Dolling) [NEW]	VC53 (A)	-
Tytthus pubescens (Knight) [NEW]	VC53	_
Tytthus pygmaeus (Zetterstedt) [NEW]	VC53	VC54 (A)
7		
CERATOCOMBIDAE		
Ceratocombus coleoptratus (Zetterstedt) [NEW]	-	VC54
SALDIDAE		
Chartoscirta cincta (Herrich-Schaeffer)	VC53 (A)	VC54
Chartoscirta cocksii (Curtis)	-	VC54
Chiloxanthus pilosus (Fallén)	-	VC54
Halosalda lateralis (Fallén)	-	VC54
Salda littoralis (Linnaeus)	VC53	VC54
Saldula opacula (Zetterstedt) [NEW]	VC53 (16)	_
Saldula orthochila (Fieber)	VC53	VC54
Saldula pilosella (Thomson)	_	VC54
Saldula pallipes (Fabricius) [NEW]	VC53	VC54
Saldula palustris (Douglas) [NEW]	-	VC54
Saldula saltatoria (Linnaeus)	VC53 (1)	VC54
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MESOVELIIDAE		
Mesovelia furcata Mulsant & Rey [NEW]	VC53 (B)	VC54 (B)

HEBRIDAE Hebrus ruficeps Thomson	VC53 (B)	-
HYDROMETRIDAE Hydrometra stagnorum (Linnaeus)	VC53 (5)	VC54 (5)
Veliidae		
Microvelia reticulata (Burmeister)	VC53 (4)	VC54 (4)
Velia caprai Tamanini	VC53	VC54 (5)
Velia saulii Tamanini	VC53 (1)	-
Gerridae		
Aquarius najas (De Geer)	VC53	-
Gerris argentatus Schummel	VC53 (5)	VC54
Gerris gibbifer Schummel	-	VC54 (3)
Gerris lacustris (Linnaeus)	VC53 (5)	VC54 (5)
Gerris odontogaster (Zetterstedt)	VC53 (5)	VC54
Gerris thoracicus Schummel	VC53 (5)	VC54 (5)
NEPIDAE		
Nepa cinerea Linnaeus	VC53 (5)	VC54 (5)
Ranatra linearis (Linnaeus)	VC53 (5)	VC54
Naucoridae		
Ilyocoris cimicoides (Linnaeus)	VC53 (5)	VC54
APHELOCHEIRIDAE		
Aphelocheirus aestivalis (Fabricius)	VC53	VC54 (5)
NOTONECTIDAE		
Notonecta glauca Linnaeus	VC53 (5)	VC54 (5)
Notonecta maculata Fabricius	VC53	VC54 (4)
Notonecta obliqua Thunberg	VC53 (B)	VC54 (B)
Notonecta viridis Delcourt	VC53 (5)	VC54 (5)
PLEIDAE		
Plea minutissima Leach	VC53	VC54
CORIXIDAE		
Arctocorisa carinata (C.R. Sahlberg)	-	VC54 (4)
Arctocorisa germari (Fieber)	-	VC54
Callicorixa praeusta (Fieber)	VC53 (5)	VC54
Corixa affinis Leach	VC53 (5)	VC54
Corixa dentipes Thomson	VC53 (5)	VC54 (5)
Corixa panzeri Fieber	VC53	VC54 (5)
Corixa punctata (Illiger)	VC53 (5)	VC54 (5)
Cymatia bonsdorffii (C.R. Sahlberg)	VC53 (5)	VC54
Cymatia coleoptrata (Fabricius)	VC53 (5)	VC54
Hesperocorixa castanea (Thomson)	VC53 (5)	VC54 (5)
Hesperocorixa linnaei (Fieber)	VC53 (5)	VC54
Hesperocorixa moesta (Fieber) [NEW]	VC53	VC54
Hesperocorixa sahlbergi (Fieber)	VC53 (5)	VC54 (5)
Micronecta poweri (Douglas & Scott)	VC53	-
Micronecta scholtzi (Fieber)	VC53 (5)	VC54 (5)
Paracorixa concinna (Fieber)	VC53 (5)	VC54

CORIXIDAE (CONTINUED)		
Sigara distincta (Fieber)	VC53 (7)	VC54
Sigara dorsalis (Leach)	VC53 (5)	VC54 (5)
Sigara falleni (Fieber)	VC53 (5)	VC54
Sigara fossarum (Leach)	VC53 (5)	VC54
Sigara iactans Jansson	VC53 (10)	-
Sigara lateralis (Leach)	VC53 (5)	VC54
Sigara limitata (Fieber)	-	VC54
Sigara nigrolineata (Fieber)	VC53 (5)	VC54
Sigara selecta (Fieber)	-	VC54 (5)
Sigara semistriata (Fieber)	-	VC54 (1)
Sigara stagnalis (Leach)	VC53	VC54 (5)
Sigara striata (Linnaeus)	-	VC54
Sigara venusta (Douglas & Scott)	-	VC54

TABLE 1. The references relating to the numbers in the list of divided records.

1 2 3 4 5 6 7	Bratton et al. (1989) Ely (1982) Mason (1888) Roebuck (1935) Huxley (2003) Nau (1978) Kirby (1983)	10 11 12 13 14 15 16	Chadd (2007) Binding (2007) Binding (2008) Alexander (2009) Talbot (2009) Bantock (2014) Rowley & Warnes (2016)
7 8			` /
9	Binding (2006)	·	

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Appendix A: records from a dataset provided by Colin Smith

Aradus depressus (Fabricius) (Aradidae)

VC53: 10/03/2010, SK961685, Lincoln.

Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae)

VC53: 01/09/1974, TF0920, Bourne.

Cyphostethus tristriatus (Fabricius) (Acanthosomatidae)

VC53: 19/08/1992, TF1929, Gosberton Clough.

VC54: 12/09/1990, TF5660, Gibraltar Point NNR.

Elasmostethus interstinctus (Linnaeus) (Acanthosomatidae)

VC53: 27/04/1993, SK890645, Housham.

VC54: 16/08/1973, TF2163, Moor Farm LWT Reserve.

Elasmucha grisea (Linnaeus) (Acanthosomatidae)

VC53: 14/09/1986, SK988428, Ancaster Valley.

VC54: 03/06/1973, TF2163, Moor Farm LWT Reserve.

Legnotus limbosus (Geoffroy) (Cydnidae)

VC54: 06/06/1993, TF2163, Moor Farm LWT Reserve.

Sehirus luctuosus Mulsant & Rey (Cydnidae)

VC53: 10/05/2002, SK913673, Whisby N. Park.

Tritomegas bicolor (Linnaeus) (Cydnidae)

VC54: 30/05/1984, TF1198, Nettleton Top.

Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae)

VC54: 28/07/2003, SE740015, Cove Farm - Fields Nr. Haxey.

Aelia acuminata (Linnaeus) (Pentatomidae)

VC53: 09/06/2010, SK962686, Lincoln, Bracebridge.

Eysarcoris venustissimus (Schrank) (Pentatomidae)

VC53: 20/01/2009, SK9621868778, Lincoln.

VC54: 12/06/1993, TF203572, Tattershall.

Neottiglossa pusilla (Gmelin) (Pentatomidae)

VC53: 11/06/1996, TF030436, Rauceby Warren LWT Reserve.

VC54: 16/08/1973, TF2163, Moor Farm LWT Reserve.

Palomena prasina (Linnaeus) (Pentatomidae)

VC53: 23/08/1999, TF026190, Grimsthorpe Park - Cross Roads.

Pentatoma rufipes (Linnaeus) (Pentatomidae)

VC53: 02/03/1988, TF093162, Dole Wood.

Picromerus bidens (Linnaeus) (Pentatomidae)

VC53: 14/09/1997, SK963678, Lincoln - Witham Marshes.

Piezodorus lituratus (Fabricius) (Pentatomidae)

VC53: 27/04/1993, SK890645, Housham.

Podops inunctus (Fabricius) (Pentatomidae)

VC54: 10/04/2004, TF082779, Rand Wood.

Troilus luridus (Fabricius) (Pentatomidae)

VC53: 17/10/1993, SK939685, Lincoln - Swanholme Lakes LNR.

Zicrona caerulea (Linnaeus) (Pentatomidae)

VC53: 15/06/1993, SK913667, Whisby Pits Nature Park.

Leptoglossus occidentalis Heidemann (Coreidae)

VC53: 25/04/2010, TF100278, Rippingale.

VC54: 07/09/2010, TA191150, Immingham.

Chorosoma schillingii (Schilling) (Rhopalidae)

VC54: 01/01/1995, TF1959, Tattershall Old Gravel Pits Area.

Corizus hyoscyami (Linnaeus) (Rhopalidae)

VC53: 30/07/2010, TF1218, Bourne South Fen.

VC54: 17/08/2010, TA113022, garden in Caistor.

Myrmus miriformis (Fallén) (Rhopalidae)

VC53: 24/07/2010, SK961684, Lincoln.

Rhopalus parumpunctatus Schilling (Rhopalidae)

VC54: 11/10/2015, TF555582, Gibraltar Point, wood.

Rhopalus subrufus (Gmelin) (Rhopalidae)

VC53: 12/06/2001, SK962195, Porters Lodge Meadow LWT Res.

VC54: 11/05/2003, TF121753, College Wood, first junction.

Stictopleurus punctatonervosus (Goeze) (Rhopalidae)

VC53: 24/07/2010, SK961684, Lincoln.

VC54: 03/08/2015, TF339466, Boston, A16 Cowbridge drain.

Chilacis typhae (Perris) (Lygaeidae)

VC53: 12/12/2004, SK914674, Whisby N. Park.

Cymus claviculus (Fallén) (Lygaeidae)

VC53: 26/05/2013, SK957682, Lincoln.

VC54: 02/12/1999, TF102914, Middle Rasen Plantation, Caistor road entrance.

Cymus glandicolor Hahn (Lygaeidae)

VC54: 10/01/2007, SE845016, Laughton Forest, Tuetoes Hills.

Cymus melanocephalus Fieber (Lygaeidae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Drymus brunneus (R.F. Sahlberg) (Lygaeidae)

VC53: 31/05/2004, TF023707, Washingborough - Willow Court.

Drymus latus Douglas & Scott (Lygaeidae)

VC54: 14/02/2006, TF224619, Kirkby Moor, heath left of track.

Drymus sylvaticus (Fabricius) (Lygaeidae)

VC53: 24/04/2005, SK9167, Whisby N Park (Willow Lake).

VC54: 31/08/2000, TF205917, Binbrook.

Eremocoris podagricus (Fabricius) (Lygaeidae)

VC53: 26/05/2001, TF249241, Vernatt's LNR, Spalding.

Gastrodes grossipes (De Geer) (Lygaeidae)

VC53: 24/05/1996, TF030436, Rauceby Warren LWT Reserve.

Heterogaster urticae (Fabricius) (Lygaeidae)

VC53: 18/10/1994, TF023707, Washingborough.

Ischnodemus sabuleti (Fallén) (Lygaeidae)

VC54: 22/02/2004, TF140884, Willingham Forest, Picnic area and Ponds.

Kleidocerys resedae (Panzer) (Lygaeidae)

VC53: 17/10/1993, SK9469, Lincoln - Hartsholme Country Park.

Megalonotus antennatus (Schilling) (Lygaeidae)

VC54: 24/08/1999, TF082779, Rand Wood.

Megalonotus chiragra (Fabricius) (Lygaeidae)

VC53: 14/03/2006, TF013602, Metheringham Heath.

Megalonotus dilatatus (Herrich-Schaeffer) (Lygaeidae)

VC54: 12/02/2009, SK869984, Scotton Common, gorse along roadside.

Megalonotus emarginatus (Rey) (Lygaeidae)

VC53: 22/07/2011, SK957682, Lincoln.

Megalonotus sabulicola (Thomson) (Lygaeidae)

VC53: 03/05/2011, SK941681, Lincoln.

Metopoplax ditomoides (A. Costa) (Lygaeidae)

VC54: 16/04/2002, TF012901, Glentham, Barff Farm (Caenby).

Nysius senecionis (Schilling) (Lygaeidae)

VC53: 01/09/2004, TF264476, Langrick Bridge - River Witham.

VC54: 13/11/2010, TA293064, Cleethorpes, layby opposite Tesco.

Nysius thymi (Wolff) (Lygaeidae)

VC53: 15/06/2010, SK962686, Lincoln, Bracebridge.

Orsillus depressus (Mulsant & Rey) (Lygaeidae)

VC53: 21/08/2010, SK9568, Lincoln.

Peritrechus geniculatus (Hahn) (Lygaeidae)

VC53: 09/05/2011, SK936674, Lincoln.

Peritrechus lundii (Gmelin) (Lygaeidae)

VC53: 28/03/2012, SK957682, Lincoln.

Peritrechus nubilus (Fallén) (Lygaeidae)

VC54: 09/02/2005, TF224619, Kirkby Moor, heath left of track.

Scolopostethus affinis (Schilling) (Lygaeidae)

VC53: 07/12/2004, TF1317, Northorpe Fen Slipe.

Scolopostethus decoratus (Hahn) (Lygaeidae)

VC53: 19/08/2009, SK966690, Lincoln.

VC54: 19/06/1988, SE9404, Manton Warren.

Scolopostethus thomsoni Reuter (Lygaeidae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Stygnocoris fuligineus (Geoffroy) (Lygaeidae)

VC53: 26/07/2011, SK955677, Lincoln.

VC54: 01/08/2000, TF105892, Market Rasen, Dear Street.

Stygnocoris rusticus (Fallén) (Lygaeidae)

VC53: 25/08/2009, SK959685, Lincoln.

Taphropeltus contractus (Herrich-Schaeffer) (Lygaeidae)

VC53: 12/02/2012, SK951688, Lincoln.

VC54: 12/04/2004, TF229583, Coningsby - The Pingle.

Trapezonotus desertus Seidenstücker (Lygaeidae)

VC54: 10/04/2004, TF082779, Rand Wood.

Metatropis rufescens (Herrich-Schaeffer) (Berytidae)

VC54: 06/05/2005, TF3484, Kenwick Park.

Acalypta parvula (Fallén) (Tingidae)

VC53: 07/08/1997, TF018706, Washingborough - Washingborough Hall Hotel.

Dictyla convergens (Herrich-Schaeffer) (Tingidae)

VC53: 15/07/2011, SK9618168734, Lincoln.

Dictyonota fuliginosa A. Costa (Tingidae)

VC54: 02/08/2015, TF140884, Willingham Forest, Picnic area and Ponds.

Tingis ampliata (Herrich-Schaeffer) (Tingidae)

VC53: 14/05/1995, TF007708, Washingborough Junction.

Tingis cardui (Linnaeus) (Tingidae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

VC54: 19/08/1995, TF562587, Gibraltar Point NNR.

Empicoris baerensprungi (Dohrn) (Reduviidae)

VC53: 06/07/2013, SK943689, Lincoln.

Empicoris culiciformis (De Geer) (Reduviidae)

VC54: 28/05/2005, TF109894, Market Rasen, Woodgrove.

Himacerus apterus (Fabricius) (Nabidae)

VC53: 05/08/2004, SK9167, Whisby Nature Park (Magpie Walk).

Nabis ferus (Linnaeus) (Nabidae)

VC53: 12/08/2004, TF067676, Potterhanworth Booths.

Nabis limbatus Dahlbom (Nabidae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

VC54: 18/09/1999, TF548764, Anderby Creek.

Nabis pseudoferus Remane (Nabidae)

VC53: 02/08/2013, SK960685, Lincoln.

Acompocoris alpinus Reuter (Anthocoridae)

VC54: 25/06/2000, TF135874, Linwood Warren, mature heather.

Anthocoris confusus Reuter (Anthocoridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Anthocoris limbatus Fieber (Anthocoridae)

VC54: 19/09/2009, TA315045, Humberston Blowell.

Anthocoris nemoralis (Fabricius) (Anthocoridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Anthocoris nemorum (Linnaeus) (Anthocoridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Anthocoris pilosus (Jakovlev) (Anthocoridae)

VC54: 11/05/1993, TF5658, Gibraltar Point NNR.

Buchananiella continua (F.B. White) (Anthocoridae)

VC54: 04/03/2007, TA293064, Cleethorpes, layby opposite Tesco.

Cardiastethus fasciiventris (Garbiglietti) (Anthocoridae)

VC54: 19/07/2000, TF336432, Boston.

Orius laevigatus (Fieber) (Anthocoridae)

VC54: 27/07/2000, TF082779, Rand Wood.

Orius laticollis (Reuter) (Anthocoridae)

VC54: 27/07/2000, TF140884, Willingham Forest, Picnic area and Ponds.

Orius majusculus (Reuter) (Anthocoridae)

VC53: 12/08/2004, TF067676, Potterhanworth Booths.

Orius niger (Wolff) (Anthocoridae)

VC54: 27/07/1990, SK910749, Nr.Saxilby - Fossdyke Canal.

Orius vicinus (Ribaut) (Anthocoridae)

VC54: 23/07/2000, TF105892, Market Rasen, Dear Street.

Temnostethus gracilis Horváth (Anthocoridae)

VC54: 02/07/2006, TF105892, Market Rasen, Dear Street.

Temnostethus pusillus (Herrich-Schaeffer) (Anthocoridae)

VC53: 05/10/2003, SK912666, Whisby Nature Park.

Tetraphleps bicuspis (Herrich-Schaeffer) (Anthocoridae)

VC53: 31/01/2001, SK913695, Doddington, crossroads by wood.

Cimex lectularius Linnaeus (Cimicidae)

VC53: 25/11/2010, TF0745, Sleaford.

Loricula elegantula (Baerensprung) (Microphysidae)

VC53: 16/08/2009, SK958683, Lincoln.

Acetropis gimmerthalii (Flor) (Miridae)

VC53: 10/06/2006, SK908662, Whisby N. R., education centre.

Adelphocoris lineolatus (Goeze) (Miridae)

VC53: 14/07/2007, SK912666, Whisby N. R., Corner of Grebe Lake.

Alloeotomus gothicus (Fallén) (Miridae)

VC54: 27/07/2006, TF109894, Market Rasen, Woodgrove.

Amblytylus nasutus (Kirschbaum) (Miridae)

VC54: 13/06/2007, TF186778, Sotby Wood, first corner.

Apolygus lucorum (Meyer-Dür) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Apolygus spinolae (Meyer-Dür) (Miridae)

VC54: 08/08/2015, TA227100, Healing, B1201.

Asciodema obsoleta (Fieber) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Atractotomus mali (Meyer-Dür) (Miridae)

VC54: 07/07/2003, TF1270, Scotgrove Wood.

Atractotomus parvulus Reuter (Miridae)

VC53: 23/07/2011, SK944682, Lincoln.

Blepharidopterus angulatus (Fallén) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Bryocoris pteridis (Fallén) (Miridae)

VC53: 21/08/2009, SK960685, Lincoln.

Calocoris roseomaculatus (De Geer) (Miridae)

VC53: 19/08/2009, SK958685, Lincoln.

Campyloneura virgula (Herrich-Schaeffer) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Capsodes gothicus (Linnaeus) (Miridae)

VC54: 25/06/2006, TF128876, Linwood Warren, side entrance and pond.

Capsus ater (Linnaeus) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Chlamydatus pullus (Reuter) (Miridae)

VC54: 28/07/2003, SE740015, Cove Farm - Fields Nr. Haxey.

Closterotomus fulvomaculatus (De Geer) (Miridae)

VC53: 03/06/2010, SK967692, Lincoln.

VC54: 11/08/2000, TF121753, College Wood, first junction.

Closterotomus norwegicus (Gmelin) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Compsidolon salicellum (Herrich-Schaeffer) (Miridae)

VC53: 15/07/2011, SK960685, Lincoln.

VC54: 11/08/2000, TF121753, College Wood, first junction.

Conostethus venustus (Fieber) (Miridae)

VC54: 08/08/2015, TA227100, Healing, B1201.

Cyllecoris histrionius (Linnaeus) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Deraeocoris flavilinea (A. Costa) (Miridae)

VC53: 17/06/2010, SK955691, Lincoln.

VC54: 16/08/2003, TF147883, Willingham Forest, track along east edge of wood.

Deraeocoris lutescens (Schilling) (Miridae)

VC53: 17/08/2001, SK962195, Porters Lodge Meadow LWT Res.

Deraeocoris olivaceus (Fabricius) (Miridae)

VC54: 21/08/1999, TA079241, Fairfield Pit LWT Reserve.

Deraeocoris ruber (Linnaeus) (Miridae)

VC54: 20/08/1995, TF1573, Minting Park.

Dichrooscytus gustavi Josifov (Miridae)

VC53: 31/07/2015, SK916709, Skellingthorpe, footpath to Doddington.

Dicyphus epilobii Reuter (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

VC54: 27/07/1990, SK8499, Laughton Forest.

Dicyphus errans (Wolff) (Miridae)

VC53: 01/07/2008, SK912666, Whisby N. R., Corner of Grebe Lake.

VC54: 01/10/2000, SK997748, Nettleham Fields, old A46 road.

Dicyphus stachydis J. Sahlberg (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

VC54: 25/08/2000, TF397666, Spilsby.

Dryophilocoris flavoquadrimaculatus (De Geer) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

VC54: 24/05/2000, SK8295, Owlet Plantation WT Reserve.

Europiella artemisiae (Becker) (Miridae)

VC53: 22/08/2009, SK960685, Lincoln.

Grypocoris stysi (Wagner) (Miridae)

VC53: 01/07/1996, TF007706, Washingborough.

Harpocera thoracica (Fallén) (Miridae)

VC53: 14/08/2005, SK9166, Whisby Nature Park, Grebe Lake Area.

Heterocordylus tibialis (Hahn) (Miridae)

VC54: 09/07/2006, TF091996, Claxby Moor, A46.

Heterotoma planicornis (Pallas) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Leptopterna dolabrata (Linnaeus) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

VC54: 25/07/2000, TF214823, Benniworth, first copse along high street.

Leptopterna ferrugata (Fallén) (Miridae)

VC53: 26/06/2011, SK958685, Lincoln.

Liocoris tripustulatus (Fabricius) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Lopus decolor (Fallén) (Miridae)

VC53: 09/08/2012, SK9400168172, Lincoln.

Lygocoris pabulinus (Linnaeus) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Lygus maritimus Wagner (Miridae)

VC54: 08/09/2008, TA262112, Grimsby, Pyewipe.

Lygus pratensis (Linnaeus) (Miridae)

VC53: 19/08/2009, SK958686, Lincoln.

VC54: 01/04/2004, TF121753, College Wood, first junction.

Lygus rugulipennis Poppius (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

VC54: 27/07/1990, SK8499, Laughton Forest.

Lygus wagneri Remane (Miridae)

VC54: 10/08/2004, TF131893, Willingham Forest, Chapel Hill Farm.

Macrolophus pygmaeus (Rambur) (Miridae)

VC54: 17/05/2008, TF257695, Horncastle, Banovallum House.

Macrolophus rubi Woodroffe (Miridae)

VC53: 29/07/2010, SK946687, Lincoln.

Macrotylus paykullii (Fallén) (Miridae)

VC54: 21/07/2008, TF470917, Saltfleetby-Theddlethorpe N. R.

Macrotylus solitarius (Meyer-Dür) (Miridae)

VC54: 26/07/2001, TF133685, Southrey Wood, main entrance.

Malacocoris chlorizans (Panzer) (Miridae)

VC53: 16/08/2009, SK957686, Lincoln.

Mecomma ambulans (Fallén) (Miridae)

VC53: 13/08/2012, SK964678, Lincoln.

Megacoelum infusum (Herrich-Schaeffer) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Megalocoleus molliculus (Fallén) (Miridae)

VC54: 27/07/1990, SK910749, Nr.Saxilby - Fossdyke Canal.

Miris striatus (Linnaeus) (Miridae)

VC53: 11/06/1995, SK9469, Lincoln - Hartsholme Country Park.

Neolygus contaminatus (Fallén) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Neolygus populi (Leston) (Miridae)

VC53: 29/08/2009, SK955680, Lincoln.

Notostira elongata (Geoffroy) (Miridae)

VC53: 12/08/2004, TF067676, Potterhanworth Booths.

Oncotylus viridiflavus (Goeze) (Miridae)

VC53: 23/06/2011, SK958685, Lincoln.

VC54: 02/08/2004, TF146739, Little Meadow - Chambers Farm Wood.

Orthonotus rufifrons (Fallén) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Orthops basalis (A. Costa) (Miridae)

VC53: 25/08/2009, SK959685, Lincoln.

VC54: 27/08/2000, TF017847, Spridlington.

Orthops campestris (Linnaeus) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

VC54: 27/07/1990, SK910749, Nr.Saxilby - Fossdyke Canal.

Orthops kalmii (Linnaeus) (Miridae)

VC53: 15/07/2009, SK9594068525, Lincoln.

VC54: 05/08/2008, TF015898, Caenby.

Orthotylus adenocarpi (Perris) (Miridae)

VC54: 27/07/2000, TF140884, Willingham Forest, Picnic area and Ponds.

Orthotylus flavinervis (Kirschbaum) (Miridae)

VC53: 04/07/2010, SK962688, Lincoln.

Orthotylus flavosparsus (C.R. Sahlberg) (Miridae)

VC54: 08/08/2004, TF105892, Market Rasen, Dear Street.

Orthotylus marginalis Reuter (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

VC54: 26/07/2000, TF228734, Baumber Corner.

Orthotylus moncreaffi (Douglas & Scott) (Miridae)

VC54: 29/06/2006, TF422999, Donna Nook, Car Park.

Orthotylus nassatus (Fabricius) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Orthotylus ochrotrichus Fieber (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Orthotylus prasinus (Fallén) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Orthotylus tenellus (Fallén) (Miridae)

 $VC53:\ 22/06/1995,\ SK950230,\ Twyford\ Forest,\ Nr.\ Colsterworth.$

Orthotylus virescens (Douglas & Scott) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

VC54: 19/08/2000, TA293064, Cleethorpes, layby opposite Tesco.

Phoenicocoris obscurellus (Fallén) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Phylus coryli (Linnaeus) (Miridae)

VC53: 01/07/2008, SK912666, Whisby N. R., Corner of Grebe Lake.

Phylus melanocephalus (Linnaeus) (Miridae)

VC53: 08/06/2006, SK866615, Swinderby, wood by A46.

Phytocoris dimidiatus Kirschbaum (Miridae)

VC54: 01/09/2005, TF131893, Willingham Forest, Chapel Hill Farm.

Phytocoris longipennis Flor (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Phytocoris tiliae (Fabricius) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Phytocoris ulmi (Linnaeus) (Miridae)

VC53: 15/08/2004, SK923671, Whisby Pits Complex.

Phytocoris varipes Boheman (Miridae)

VC53: 02/08/2000, TF267368, Wigtoft.

VC54: 01/08/2001, TF223617, Kirkby Moor, end of track.

Pilophorus perplexus Douglas & Scott (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Pinalitus cervinus (Herrich-Schaeffer) (Miridae)

VC53: 12/08/2004, TF067676, Potterhanworth Booths.

Pithanus maerkelii (Herrich-Schaeffer) (Miridae)

VC53: 06/07/2013, SK945693, Hartsholme Park.

Placochilus seladonicus (Fallén) (Miridae)

VC54: 26/07/2001, SK965927, Atterby.

Plagiognathus arbustorum (Fabricius) (Miridae)

VC53: 27/07/1990, SK9563, Harmston Lowfields, Nr Aubourn.

Plagiognathus chrysanthemi (Wolff) (Miridae)

VC53: 01/07/2008, SK912670, Whisby N. R.

Platycranus bicolor (Douglas & Scott) (Miridae)

VC53: 08/09/2009, SK954690, Lincoln.

Plesiodema pinetella (Zetterstedt) (Miridae)

VC54: 13/07/2006, TF131893, Willingham Forest, Chapel Hill Farm.

Polymerus nigrita (Fallén) (Miridae)

VC54: 29/08/2004, TF111902, Market Rasen, Tealby road railway crossing.

Polymerus unifasciatus (Fabricius) (Miridae)

VC54: 17/07/2004, TF555582, Gibraltar Point, wood.

Psallus ambiguus (Fallén) (Miridae)

VC53: 09/06/2005, TF249241, Vernatt's LNR, Spalding.

Psallus confusus Rieger (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

VC54: 25/06/2006, TF133876, Linwood Warren, main entrance.

Psallus flavellus Stichel (Miridae)

VC54: 18/07/2004, TF1275, College Wood.

Psallus haematodes (Gmelin) (Miridae)

VC53: 16/08/2009, SK956686, Lincoln.

Psallus perrisi (Mulsant & Rey) (Miridae)

VC54: 25/06/2000, TF135874, Linwood Warren, mature heather.

Psallus variabilis (Fallén) (Miridae)

VC54: 30/06/2015, TF090923, Osgodby Moor, Heath clearing.

Psallus varians (Herrich-Schaeffer) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Pseudoloxops coccineus (Meyer-Dür) (Miridae)

VC54: 07/08/2000, TF105892, Market Rasen, Dear Street.

Rhabdomiris striatellus (Fabricius) (Miridae)

VC53: 26/05/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Stenodema calcarata (Fallén) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Stenodema laevigata (Linnaeus) (Miridae)

VC53: 22/06/1995, SK950230, Twyford Forest, Nr. Colsterworth.

Stenotus binotatus (Fabricius) (Miridae)

VC53: 02/07/2009, SK9649468781, Lincoln.

Sthenarus rotermundi (Scholtz) (Miridae)

VC53: 29/08/2009, SK955680, Lincoln.

Trigonotylus caelestialium (Kirkaldy) (Miridae)

VC53: 30/09/2009, SK961685, Lincoln.

VC54: 08/08/2004, TF105892, Market Rasen, Dear Street.

Trigonotylus ruficornis (Geoffroy) (Miridae)

VC54: 10/08/2004, TF131893, Willingham Forest, Chapel Hill Farm.

Tupiocoris rhododendri (Dolling) (Miridae)

VC53: 27/07/1990, SK905685, Cinder Plot - Doddington Woods.

Tytthus pygmaeus (Zetterstedt) (Miridae)

VC54: 21/07/2008, TF470917, Saltfleetby-Theddlethorpe N. R.

Chartoscirta cincta (Herrich-Schaeffer) (Saldidae)

VC53: 26/10/2011, SK966680, Lincoln.

Appendix B: records from a dataset provided by Richard Chadd

Mesovelia furcata Mulsant & Rey (Mesoveliidae)

VC53: 22-Sep-1999, TF2190021200, Horseshoe Bridge, South Drove Drain.

VC54: 12-Sep-1995, TF3290046500, Rawsons Bridge, Maud Foster Drain.

Hebrus ruficeps Thomson (Hebridae)

VC53: 8-Jul-2007, SK942686, Swanholme Lakes, Lincoln.

Notonecta obliqua Thunberg (Notonectidae)

VC53: 22-Sep-2008, SK9873526060, B1176, West Glen River.

VC54: 20-Sep-1994, TF2920050100, B1184, Newham Drain.

EDITOR'S NOTE: Perhaps the most interesting record in the datasets is the one for *Anthocoris pilosus* (Jakovlev) (Anthocoridae). This is only the second published record for this species in the British Isles. The previous record was from Isle of Scalpay, Hebrides, Scotland in 1936 (Southwood & Leston, 1959, *Land and water bugs of the British Isles*, Warne).

NEW COUNTY RECORDS OF HEMIPTERA-HETEROPTERA FROM A DATA SET PROVIDED BY STEVE LANE

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Steve Lane recently sent me an Excel spreadsheet containing 12,461 records of Hemiptera-Heteroptera which I checked against the county distribution (Ryan 2014a & 2014b). The data set was found to contain 264 records new to the county distribution, which I list below.

Aneurus avenius (Dufour) (Aradidae)

WEST NORFOLK (VC28): 15 May 2014, TL7786, Brandon.

WEST SUFFOLK (VC26): 07 Aug 2015, TL78, Brandon.

Cyphostethus tristriatus (Fabricius) (Acanthosomatidae)

WEST NORFOLK (VC28): 03 Nov 2014, TF6740, Hunstanton, Tescos car park.

WEST SUFFOLK (VC26): 19 Aug 2014, TL78, Brandon.

Elasmostethus interstinctus (Linnaeus) (Acanthosomatidae)

SHROPSHIRE (VC40): 21 Apr 2008, SJ491160, Hencott Pool.

Elasmucha grisea (Linnaeus) (Acanthosomatidae)

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

Sehirus luctuosus Mulsant & Rey (Cydnidae)

LEICESTERSHIRE (VC55): 06 May 2014, SK4311, Hugglescote coal waste site.

WARWICKSHIRE (VC38): 09 May 1998, SP1755, Bishopton Lane.

Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae)

WEST SUFFOLK (VC26): 16 May 2014, TL78, Brandon.

Eurygaster testudinaria (Geoffroy) (Scutelleridae)

WARWICKSHIRE (VC38): 24 May 2007, SP3875, Brandon Marsh NR.

Aelia acuminata (Linnaeus) (Pentatomidae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

STAFFORDSHIRE (VC39): 25 Jun 2012, SP0199, Mill Lane LNR, Walsall.

Dolycoris baccarum (Linnaeus) (Pentatomidae)

DERBYSHIRE (VC57): 10 Jun 2012, SK098725, Wye Valley.

NOTTINGHAMSHIRE (VC56): 2012, SK5524, Rempstone.

Eurydema oleracea (Linnaeus) (Pentatomidae)

WEST NORFOLK (VC28): 10 May 2014, TL7887, Brandon, Norfolk.

WEST SUFFOLK (VC26): 25 Apr 2014, TL78, Brandon, Suffolk.

WARWICKSHIRE (VC38): 2004, SP390688, Eathorpe NR.

Eysarcoris venustissimus (Schrank) (Pentatomidae)

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

WEST NORFOLK (VC28): 12 Sep 2013, TF6834, Snettisham, Carrstone Pit (Frimstone Ltd).

NOTTINGHAMSHIRE (VC56): 2012, SK5524, Rempstone.

STAFFORDSHIRE (VC39): 16 Aug 2013, SK1815, Catholme (near Barton-under-Needwood).

Neottiglossa pusilla (Gmelin) (Pentatomidae)

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4212, Hugglescote.

Palomena prasina (Linnaeus) (Pentatomidae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

STAFFORDSHIRE (VC39): 25 Jun 2012, SP0194, Wednesbury/West Bromwich.

Piezodorus lituratus (Fabricius) (Pentatomidae)

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4311, Hugglescote coal waste site.

STAFFORDSHIRE (VC39): 25 Jul 2012, SK0100, Mill Lane LNR, Walsall.

Podops inunctus (Fabricius) (Pentatomidae)

STAFFORDSHIRE (VC39): 26 Jun 2012, SK0503, Shire Oak NR, Brownhills.

Troilus luridus (Fabricius) (Pentatomidae) SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool. Zicrona caerulea (Linnaeus) (Pentatomidae) CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46. Arenocoris fallenii (Schilling) (Coreidae) CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46. Arenocoris waltlii (Herrich-Schaeffer) (Coreidae) CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46. Ceraleptus lividus Stein (Coreidae) WEST NORFOLK (VC28): 01 Sep 2014, TF7044, Holme. WARWICKSHIRE (VC38): 27 May 2015, SP3770, Wappenbury Wood NR. Coreus marginatus (Linnaeus) (Coreidae) CAMBRIDGESHIRE (VC29): 23 Jul 2015, TL56. LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough. WEST NORFOLK (VC28): 26 Sep 2013, TF7511, Narborough Dismantled Railway Line NR. STAFFORDSHIRE (VC39): 25 Jun 2012, SO9495, Bilston, Wolverhampton. WARWICKSHIRE (VC38): 23 Apr 2005, SP2055, Moat House Grounds. Coriomeris denticulatus (Scopoli) (Coreidae) CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46. DERBYSHIRE (VC57): May 2012, SK3947, Denby. LEICESTERSHIRE (VC55): 16 Apr 2014, SK4312, Hugglescote coal waste site. STAFFORDSHIRE (VC39): 25 Jun 2012, SP0194, Wednesbury/West Bromwich. Gonocerus acuteangulatus (Goeze) (Coreidae) WEST SUFFOLK (VC26): 30 Jul 2014, TL78, Brandon. Syromastus rhombeus (Linnaeus) (Coreidae) WEST NORFOLK (VC28): 29 Jan 2014, TF8331, Syderstone Common NR. Corizus hyoscyami (Linnaeus) (Rhopalidae) CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46. WARWICKSHIRE (VC38): 2011, SP290895, Arley. Myrmus miriformis (Fallén) (Rhopalidae) DERBYSHIRE (VC57): 18 Jul 2013, SK3735, The Sanctuary, Pride Park, Derby. Rhopalus parumpunctatus Schilling (Rhopalidae) CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46. Rhopalus subrufus (Gmelin) (Rhopalidae) CAMBRIDGESHIRE (VC29): 10 Sep 2015, TL46. DERBYSHIRE (VC57): May 2012, SK3947, Denby. LEICESTERSHIRE (VC55): 06 May 2014, SK4212, Hugglescote, railway triangle grassland. STAFFORDSHIRE (VC39): 25 Jun 2012, SO9495, Bilston, Wolverhampton. Stictopleurus abutilon (Rossi) (Rhopalidae) WEST SUFFOLK (VC26): 03 Sep 2015, TL78. Stictopleurus punctatonervosus (Goeze) (Rhopalidae) DERBYSHIRE (VC57): May 2012, SK3947, Denby. NORTHAMPTONSHIRE (VC32): 29 Sep 2014, SP8891, Corby, Brookfield Plantation. STAFFORDSHIRE (VC39): 09 Aug 2012, SO9495, Bilston, Wolverhampton. WARWICKSHIRE (VC38): 15 Jul 2005, SP3877, Claybrookes Marsh. Cymus glandicolor Hahn (Lygaeidae) LEICESTERSHIRE (VC55): 06 May 2014, SK4312, Hugglescote coal waste site. Cymus melanocephalus Fieber (Lygaeidae) CAMBRIDGESHIRE (VC29): 10 Jun 2015, TL46. DERBYSHIRE (VC57): May 2012, SK3947, Denby. STAFFORDSHIRE (VC39): 25 Jun 2012, SP0199, Mill Lane LNR, Walsall. Drymus latus Douglas & Scott (Lygaeidae)

WEST NORFOLK (VC28): 22 Nov 2013, TF68713679, Heacham Chalk Pit. WARWICKSHIRE (VC38): 12 Mar 2013, SP434519, Fenny Compton (near).

Drymus ryeii Douglas & Scott (Lygaeidae)

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

STAFFORDSHIRE (VC39): 26 Jun 2012, SK0503, Shire Oak NR, Brownhills.

WEST SUFFOLK (VC26): 16 May 2014, TL78, Brandon.

Eremocoris podagricus (Fabricius) (Lygaeidae)

WEST NORFOLK (VC28): 26 Sep 2013, TF7610, Narborough (fields near railway line NR).

WEST SUFFOLK (VC26): 16 May 2014, TL7686, Brandon.

Henestaris halophilus (Burmeister) (Lygaeidae)

WEST NORFOLK (VC28): 20 Jul 2015, TF8046, Scolt Head NR.

Heterogaster urticae (Fabricius) (Lygaeidae)

DERBYSHIRE (VC57): 27 Jun 2013, SK3735, The Sanctuary, Pride Park, Derby.

STAFFORDSHIRE (VC39): 25 Jun 2012, SO9495, Bilston, Wolverhampton.

Ischnocoris angustulus (Boheman) (Lygaeidae)

STAFFORDSHIRE (VC39): 07 Aug 1994, SO8389, Highgate Common.

Ischnodemus sabuleti (Fallén) (Lygaeidae)

CAMBRIDGESHIRE (VC29): 10 Jun 2015, TL46.

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4311, Hugglescote coal waste site.

WEST NORFOLK (VC28): 27 Jul 2013, TF6637, Heacham dunes.

EAST NORFOLK (VC27): 18 Jul 2014, TG3621, Catfield Fen.

NOTTINGHAMSHIRE (VC56): 04 Jun 2013, SK43.

STAFFORDSHIRE (VC39): 09 Aug 2012, SO9791, Sandwell.

Kleidocerys resedae (Panzer) (Lygaeidae)

CAMBRIDGESHIRE (VC29): 10 Jun 2015, TL46.

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

NOTTINGHAMSHIRE (VC56): 04 Jun 2013, SK43.

Lasiosomus enervis (Herrich-Schaeffer) (Lygaeidae)

WEST NORFOLK (VC28): 13 Mar 2014, TF7804, Cockleycley Wood, Deadman's Plantation.

WARWICKSHIRE (VC38): 29 Apr 1997, SP2934, Whichford Wood (DJMann).

Megalonotus antennatus (Schilling) (Lygaeidae)

WEST NORFOLK (VC28): 23 Jul 2014, TF70.

Megalonotus chiragra (Fabricius) (Lygaeidae)

CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46.

DERBYSHIRE (VC57): 10 JUN 2012, SK133733, Wye Valley, quarry.

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

WEST NORFOLK (VC28): 04 Sep 2013, TF6432, Snettisham (near yacht club).

STAFFORDSHIRE (VC39): 25 Jun 2012, SP0194, Wednesbury/West Bromwich.

WEST SUFFOLK (VC26): 04 May 2014, TL7685, Brandon.

Megalonotus emarginatus (Rey) (Lygaeidae)

CAMBRIDGESHIRE (VC29): 10 Jun 2015, TL46.

Nysius ericae (Schilling) (Lygaeidae)

STAFFORDSHIRE (VC39): 16 Aug 2013, SK1815, Catholme (near Barton-under-Needwood).

Nysius huttoni F.B. White (Lygaeidae)

CAMBRIDGESHIRE (VC29): 10 Jun 2015, TL46.

DERBYSHIRE (VC57): 01 Aug 2013, SK3735, The Sanctuary, Pride Park, Derby.

WEST NORFOLK (VC28): 12 Jun 2014, TL7887, Brandon.

Nysius senecionis (Schilling) (Lygaeidae)

WEST SUFFOLK (VC26): 01 May 2014, TL7786, Brandon.

WARWICKSHIRE (VC38): 05 Oct 2009, SP0653, Wood Bevington/Cock Bevington.

Nysius thymi (Wolff) (Lygaeidae)

WARWICKSHIRE (VC38): 17 Sep 2009, SP0995, Sutton Park (Longmoor Pool area), heathland.

Orsillus depressus (Mulsant & Rey) (Lygaeidae)

WARWICKSHIRE (VC38): 29 Apr 2007, SP4257, Hodnell Manor grounds.

Peritrechus geniculatus (Hahn) (Lygaeidae)

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

STAFFORDSHIRE (VC39): 11 Apr 1995, SO8389, Highgate Common.

Peritrechus nubilus (Fallén) (Lygaeidae)

STAFFORDSHIRE (VC39): 16 Aug 2013, SK1815, Catholme (near Barton-under-Needwood).

WARWICKSHIRE (VC38): 25 Jul 2009, SP2540, Shipston-on-Stour.

Plinthisus brevipennis (Latreille) (Lygaeidae)

STAFFORDSHIRE (VC39): 19 May 1995, SO8389, Highgate Common.

Scolopostethus grandis Horváth (Lygaeidae)

DERBYSHIRE (VC57): 19 JUN 2012, SK261562, Via Gellia, Hopton Quarry.

WEST NORFOLK (VC28): 16 Jul 2014, TF6943, Hunstanton dunes.

NORTHAMPTONSHIRE (VC32): 29 Sep 2014, SP8891, Corby, Brookfield Plantation.

WEST SUFFOLK (VC26): 03 Sep 2015, TL78.

Scolopostethus puberulus Horváth (Lygaeidae)

BUCKINGHAMSHIRE (VC24): 15 May 2013, SP62.

Stygnocoris fuligineus (Geoffroy) (Lygaeidae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

Taphropeltus contractus (Herrich-Schaeffer) (Lygaeidae)

DERBYSHIRE (VC57): 10 JUN 2012, SK133733, Wye Valle, quarry.

Trapezonotus desertus Seidenstücker (Lygaeidae)

DERBYSHIRE (VC57): 14 Jun 2012, SK251804, East Peak Moors.

STAFFORDSHIRE (VC39): 07 Aug 1994, SO8389, Highgate Common.

Trapezonotus dispar Stål (Lygaeidae)

DERBYSHIRE (VC57): 19 JUN 2012, SK261562, Via Gellia, Hopton Quarry.

Berytinus crassipes (Herrich-Schaeffer) (Berytidae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

Berytinus minor (Herrich-Schaeffer) (Berytidae)

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4312, Hugglescote coal waste site.

Berytinus montivagus (Meyer-Dür) (Berytidae)

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4312, Hugglescote coal waste site.

Metatropis rufescens (Herrich-Schaeffer) (Berytidae)

WEST NORFOLK (VC28): 29 Jun 2014, TF7015, East Winch Common.

Neides tipularius (Linnaeus) (Berytidae)

CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46.

Piesma maculatum (Laporte) (Piesmatidae)

NORTHAMPTONSHIRE (VC32): 21 May 2015, SP88.

Acalypta parvula (Fallén) (Tingidae)

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

Catoplatus fabricii (Stål) (Tingidae)

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4312, Hugglescote coal waste site.

Dictyonota strichnocera Fieber (Tingidae)

STAFFORDSHIRE (VC39): 29 Jul 1994, SK0510, Gentleshaw Common.

Physatocheila dumetorum (Herrich-Schaeffer) (Tingidae)

NORTHAMPTONSHIRE (VC32): 23 May 2013, SP45.

NOTTINGHAMSHIRE (VC56): 04 Jun 2013, SK5039.

STAFFORDSHIRE (VC39): Sep 2012, SK0401, Aldridge.

Tingis ampliata (Herrich-Schaeffer) (Tingidae)

DERBYSHIRE (VC57): May 2012, SK3947, Denby.

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

STAFFORDSHIRE (VC39): 01 Jun 1995, SJ9239, Barlaston Common, Staffordshire.

Himacerus apterus (Fabricius) (Nabidae)

STAFFORDSHIRE (VC39): Sep 2012, SK0401, Aldridge.

Himacerus mirmicoides (O. Costa) (Nabidae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

STAFFORDSHIRE (VC39): 25 Jun 2013, SK0402, Aldridge Brick Quarry (Brick Kiln Lane).

Nabis lineatus Dahlbom (Nabidae)

WARWICKSHIRE (VC38): 1890, SP24, Whitchurch.

Acompocoris alpinus Reuter (Anthocoridae)

CAMBRIDGESHIRE (VC29): 23 Jul 2015, TL46.

Acompocoris pygmaeus (Fallén) (Anthocoridae)

SHROPSHIRE (VC40): 06 May 2008, SJ491160, Hencott Pool.

Anthocoris amplicollis Horváth (Anthocoridae)

WEST SUFFOLK (VC26): 19 Aug 2014, TL7685, Brandon. Two beaten off ash at woodland edge.

Anthocoris butleri Le Quesne (Anthocoridae)

WEST NORFOLK (VC28): 20 Nov 2014, TF6941, Hunstanton Park (off box).

WARWICKSHIRE (VC38): 05 Oct 2009, SP0652, Wood Bevington/Cock Bevington (off box).

Anthocoris limbatus Fieber (Anthocoridae)

WEST NORFOLK (VC28): 08 Oct 2015, TF6713, Blackborough End Gravel Pits Fishing Lakes.

WARWICKSHIRE (VC38): 12 Aug 2011, SP2382, Meriden Sand & Gravel Quarry (Tarmac).

Anthocoris nemoralis (Fabricius) (Anthocoridae)

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4311, Hugglescote coal waste site.

Anthocoris sarothamni Douglas & Scott (Anthocoridae)

STAFFORDSHIRE (VC39): 01 Aug 1994, SJ9239, Barlaston Common, Staffordshire.

Anthocoris visci Douglas (Anthocoridae)

WARWICKSHIRE (VC38): 19 Sep 1998, SP2054, Stratford-upon-Avon (off mistletoe)

Buchananiella continua (F.B. White) (Anthocoridae)

WEST SUFFOLK (VC26): 07 Aug 2015, TL78 Brandon.

WARWICKSHIRE (VC38): 12 Jun 2009, SP0584, Edgbaston Park.

Cardiastethus fasciiventris (Garbiglietti) (Anthocoridae)

WARWICKSHIRE (VC38): 04 Sep 2004, SP2559, Hampton Wood NR.

Orius laticollis (Reuter) (Anthocoridae)

WARWICKSHIRE (VC38): 09 Aug 2010, SP2886, Fillongley.

Orius vicinus (Ribaut) (Anthocoridae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

STAFFORDSHIRE (VC39): Sep 2012, SK0401, Aldridge.

Temnostethus gracilis Horváth (Anthocoridae)

CAMBRIDGESHIRE (VC29): 23 Jul 2015, TL46.

WEST NORFOLK (VC28): 16 Sep 2014, TF9030, Sculthorpe Moor NR.

Temnostethus pusillus (Herrich-Schaeffer) (Anthocoridae)

WEST NORFOLK (VC28): 15 May 2014, TL7786, Brandon.

WEST SUFFOLK (VC26): 22 Jul 2014, TL9935, Tendring Hall, Stoke-by-Nayland.

Loricula coleoptrata (Fallén) (Microphysidae)

WEST NORFOLK (VC28): 2015, TL88.

Adelphocoris lineolatus (Goeze) (Miridae)

DERBYSHIRE (VC57): 18 Jul 2013, SK3735, The Sanctuary, Pride Park, Derby.

Agnocoris reclairei (Wagner) (Miridae)

DERBYSHIRE (VC57): 01 Aug 2013, SK3734, The Sanctuary, Pride Park, Derby.

Alloeotomus gothicus (Fallén) (Miridae)

CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46.

WEST NORFOLK (VC28): 30 Sep 2013, TF6524, Ling Common, North Wootton.

Amblytylus nasutus (Kirschbaum) (Miridae)

NOTTINGHAMSHIRE (VC56): 09 Jul 2013, SK4939.

STAFFORDSHIRE (VC39): 18 Jun 2012, SK098560, Manifold Valley, Staffordshire.

Apolygus lucorum (Meyer-Dür) (Miridae)

STAFFORDSHIRE (VC39): 29 Jul 1994, SK0510, Gentleshaw Common.

Apolygus spinolae (Meyer-Dür) (Miridae)

SHROPSHIRE (VC40): 08 Sep 2008, SJ491160, Hencott Pool.

Atractotomus mali (Meyer-Dür) (Miridae)

DERBYSHIRE (VC57): 18 Jul 2013, SK3735, The Sanctuary, Pride Park, Derby.

Bryocoris pteridis (Fallén) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Calocoris alpestris (Meyer-Dür) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

WARWICKSHIRE (VC38): 28 May 1998, SP2092, Hams Hall.

Campylomma annulicorne (Signoret) (Miridae)

WARWICKSHIRE (VC38): 08 Aug 2009, SP3875, Brandon Marsh NR.

Campylomma verbasci (Meyer-Dür) (Miridae)

CAMBRIDGESHIRE (VC29): 10 Sep 2015, TL46.

WEST NORFOLK (VC28): 12 Sep 2013, TF6834, Snettisham, Carrstone Pit (Frimstone Ltd).

Capsus ater (Linnaeus) (Miridae)

HEREFORDSHIRE (VC36): 2008, SO5215, Ganarew, Herefordshire A40.

Charagochilus gyllenhalii (Fallén) (Miridae)

STAFFORDSHIRE (VC39): 07 Aug 1994, SO8389, Highgate Common.

Chlamydatus evanescens (Boheman) (Miridae)

WEST NORFOLK (VC28): 13 Dec 2013, TF6842, Hunstanton dunes.

Chlamydatus pulicarius (Fallén) (Miridae)

WEST NORFOLK (VC28): 2015, TL89.

Chlamydatus saltitans (Fallén) (Miridae)

STAFFORDSHIRE (VC39): Sep 2012, SK0401, Aldridge.

Chlamydatus wilkinsoni (Douglas & Scott) (Miridae)

DERBYSHIRE (VC57): 14 Jun 2012, SK262807, East Peak Moors.

Closterotomus norwegicus (Gmelin) (Miridae)

HUNTINGDONSHIRE (VC31): 24 Jun 2015, TL19.

Conostethus roseus (Fallén) (Miridae)

WARWICKSHIRE (VC38): 11 Jul 1988, SP3478, Charterhouse (Barlow, A.C.).

Cyllecoris histrionius (Linnaeus) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Deraeocoris flavilinea (A. Costa) (Miridae)

CAMBRIDGESHIRE (VC29): 19 Jun 2015, TL46.

WEST NORFOLK (VC28): 10 Jun 2014, TL7887, Brandon.

STAFFORDSHIRE (VC39): 25 Jun 2012, SO9495, Bilston, Wolverhampton.

WEST SUFFOLK (VC26): 10 Jun 2014, TL78, Brandon.

WARWICKSHIRE (VC38): 2011, SP290895, Arley.

Deraeocoris lutescens (Schilling) (Miridae)

NOTTINGHAMSHIRE (VC56): 09 Jul 2013, SK5039.

SHROPSHIRE (VC40): 06 May 2008, SJ491160, Hencott Pool.

Dichrooscytus rufipennis (Fallén) (Miridae)

CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46.

Dicyphus epilobii Reuter (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Dicyphus errans (Wolff) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Dicyphus escalerae Lindberg (Miridae)

DERBYSHIRE (VC57): 18 Jul 2013, SK3735, The Sanctuary, Pride Park, Derby.

WARWICKSHIRE (VC38): 10 Jul 2013, SP281873, Fillongley, 11 Nuneaton Road, in garden.

Dicyphus globulifer (Fallén) (Miridae)

SHROPSHIRE (VC40): 06 May 2008, SJ491160, Hencott Pool.

Dicyphus stachydis J. Sahlberg (Miridae)

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4311, Hugglescote coal waste site.

SHROPSHIRE (VC40): 21 Apr 2008, SJ491160, Hencott Pool.

Europiella artemisiae (Becker) (Miridae)

CAMBRIDGESHIRE (VC29): 22 Jul 2015, TL46.

WEST NORFOLK (VC28): 12 Jun 2014, TL7887, Brandon.

NOTTINGHAMSHIRE (VC56): 09 Jul 2013, SK5039.

Europiella artemisiae (Becker) (Miridae) (Continued)

STAFFORDSHIRE (VC39): 25 Jun 2012, SP0194, Wednesbury/West Bromwich.

WEST SUFFOLK (VC26): 03 Sep 2015, TL78, Brandon.

WARWICKSHIRE (VC38): 03 Aug 1987, SP3483, Longford LNR, Coventry.

Europiella decolor (Uhler) (Miridae)

WEST NORFOLK (VC28): 31 Jul 2012, TF9644, Stiffkey saltmarshes.

Grypocoris stysi (Wagner) (Miridae)

WEST SUFFOLK (VC26): 10 Jun 2014, TL7686, Brandon.

Halticus luteicollis (Panzer) (Miridae)

WEST NORFOLK (VC28): 12 Jul 2014, TL7786, Brandon.

Hoplomachus thunbergii (Fallén) (Miridae)

WEST NORFOLK (VC28): 20 Jun 2014, TF7325, Hillington Road Verge NR.

Lopus decolor (Fallén) (Miridae)

STAFFORDSHIRE (VC39): 29 Jul 1994, SK0510, Gentleshaw Common.

Lygocoris rugicollis (Fallén) (Miridae)

NORTHAMPTONSHIRE (VC32): 17 Jun 2015, SP88.

Lygus maritimus Wagner (Miridae)

EAST KENT (VC15): 03 Jul 2012, TQ8172, Kingsnorth, Isle of Grain.

WEST NORFOLK (VC28): 15 Sep 2014, TF7244, Holme saltmarsh and path.

Lygus pratensis (Linnaeus) (Miridae)

DERBYSHIRE (VC57): 10 Jun 2012, SK098725, Wye Valley.

WARWICKSHIRE (VC38): 04 Sep 2010, SP2090, Coleshill Quarry.

Lygus rugulipennis Poppius (Miridae)

LEICESTERSHIRE (VC55): 06 May 2014, SK4311, Hugglescote coal waste site.

STAFFORDSHIRE (VC39): 08 Aug 2012, SO9893, West Bromwich.

Lygus wagneri Remane (Miridae)

DERBYSHIRE (VC57): 19 Jun 2012, SK267567, Via Gellia.

WARWICKSHIRE (VC38): 29 Sep 2011, SP2382, Meriden Sand & Gravel Quarry (Tarmac).

Malacocoris chlorizans (Panzer) (Miridae)

SHROPSHIRE (VC40): 08 Sep 2008, SJ491160, Hencott Pool.

Megacoelum infusum (Herrich-Schaeffer) (Miridae)

STAFFORDSHIRE (VC39): 26 Aug 2013, SK1612, Brookhay, near Fradley South.

Megaloceroea recticornis (Geoffroy) (Miridae)

DERBYSHIRE (VC57): 18 Jul 2013, SK3735, The Sanctuary, Pride Park, Derby.

STAFFORDSHIRE (VC39): 25 Jul 2012, SK0100, Mill Lane LNR, Walsall.

Miridius quadrivirgatus (A. Costa) (Miridae)

STAFFORDSHIRE (VC39): 16 Aug 2013, SK1916, Catholme, near Barton-under-Needwood.

Miris striatus (Linnaeus) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Neolygus populi (Leston) (Miridae)

CAMBRIDGESHIRE (VC29): 17 Jul 2015, TL48.

LEICESTERSHIRE (VC55): 02 Aug 2015, SP8797, Lyddington.

Oncotylus viridiflavus (Goeze) (Miridae)

WEST NORFOLK (VC28): 21 Jul 2014, TF7142, Holme, Green Bank (east end).

STAFFORDSHIRE (VC39): 25 Jul 2012, SK0100, Mill Lane LNR, Walsall.

Orthocephalus coriaceus (Fabricius) (Miridae)

HEREFORDSHIRE (VC36): 2008, SO5215, Ganarew, Herefordshire A40.

Orthops campestris (Linnaeus) (Miridae)

CAMBRIDGESHIRE (VC29): 17 Jul 2015, TL48.

LEICESTERSHIRE (VC55): 06 May 2014, SK4311, Hugglescote coal waste site.

WEST NORFOLK (VC28): 21 Jul 2014, TF7142, Holme, Green Bank (east end).

NORTHAMPTONSHIRE (VC32): 15 May 2015, SP88.

NOTTINGHAMSHIRE (VC56): 2012, SK5524, Rempstone.

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

STAFFORDSHIRE (VC39): 01 Jun 1995, SJ9239, Barlaston Common, Staffordshire.

Orthotylus flavosparsus (C.R. Sahlberg) (Miridae)

STAFFORDSHIRE (VC39): 16 Aug 2013, SK1815, Catholme (near Barton-under-Needwood).

Orthotylus marginalis Reuter (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Orthotylus nassatus (Fabricius) (Miridae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

Orthotylus ochrotrichus Fieber (Miridae)

STAFFORDSHIRE (VC39): 29 Jul 1994, SK0510, Gentleshaw Common.

Orthotylus tenellus (Fallén) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Orthotylus virescens (Douglas & Scott) (Miridae)

STAFFORDSHIRE (VC39): 09 Aug 2012, SO9791, Sandwell.

Phoenicocoris obscurellus (Fallén) (Miridae)

LEICESTERSHIRE (VC55): 11 Aug 2012, SP5398, Narborough.

Phylus melanocephalus (Linnaeus) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Pilophorus clavatus (Linnaeus) (Miridae)

NORTHAMPTONSHIRE (VC32): 06 Sep 2012, SP9680, Lowick.

WEST SUFFOLK (VC26): 07 Aug 2015, TL78, Brandon.

Pilophorus perplexus Douglas & Scott (Miridae)

CAMBRIDGESHIRE (VC29): 23 Jul 2015, TL46.

STAFFORDSHIRE (VC39): 26 Aug 2013, SK1612, Brookhay, near Fradley South.

Pinalitus rubricatus (Fallén) (Miridae)

WARWICKSHIRE (VC38): 28 Jul 2001, SP2895, Bentley Wood.

Platycranus bicolor (Douglas & Scott) (Miridae)

STAFFORDSHIRE (VC39): 26 Aug 2013, SK1612, Brookhay, near Fradley South.

Polymerus nigrita (Fallén) (Miridae)

STAFFORDSHIRE (VC39): 25 Jul 2012, SP0199, Mill Lane LNR, Walsall.

Polymerus palustris (Reuter) (Miridae)

WARWICKSHIRE (VC38): 1999, SP0998, Sutton Park.

Psallus lepidus Fieber (Miridae)

CAMBRIDGESHIRE (VC29): 17 Jul 2015, TL48.

Psallus luridus Reuter (Miridae)

WARWICKSHIRE (VC38): 07 Aug 2001, SP2895, Bentley Wood.

Pseudoloxops coccineus (Meyer-Dür) (Miridae)

STAFFORDSHIRE (VC39): 16 Aug 2013, SK1916, Catholme, near Barton-under-Needwood.

Rhabdomiris striatellus (Fabricius) (Miridae)

SHROPSHIRE (VC40): 16 Jun 2008, SJ491160, Hencott Pool.

Salicarus roseri (Herrich-Schaeffer) (Miridae)

DERBYSHIRE (VC57): 18 Jul 2013, SK3735, The Sanctuary, Pride Park, Derby.

Trigonotylus caelestialium (Kirkaldy) (Miridae)

WEST NORFOLK (VC28): 18 Aug 2014, TF7043, Redwell Marsh SSSI.

STAFFORDSHIRE (VC39): Sep 2012, SK0401, Aldridge.

WEST SUFFOLK (VC26): 07 Aug 2015, TL78, Brandon.

Trigonotylus ruficornis (Geoffroy) (Miridae)

WEST NORFOLK (VC28): 07 Jul 2014, TF7043, Holme.

STAFFORDSHIRE (VC39): 23 Jun 1995, SO8389, Highgate Common.

WARWICKSHIRE (VC38): 16 Aug 1996, SP0995, Sutton Park.

Tupiocoris rhododendri (Dolling) (Miridae)

WARWICKSHIRE (VC38): 30 Jun 2009, SP2075, Temple Balsall.

Hebrus ruficeps Thomson (Hebridae)

WARWICKSHIRE (VC38): 22 Mar 1998, SP0998, Sutton Park (Little Bracebridge Pool).

Hesperocorixa linnaei (Fieber) (Corixidae)

LEICESTERSHIRE (VC55): 16 Apr 2014, SK4311, Hugglescote coal waste site.

I am most grateful to Steve for sharing his records with me, for giving permission for them to be published in this journal, and for checking and correcting a draft copy of this paper.

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THE 2015 HEMIPTERA-HETEROPTERA COUNTY RECORD ROUNDUP

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The new county records published in journals outside the *Hemipterist* in 2015, which have not already been included in other articles in this journal, are listed below.

ARADIDAE

Aneurus avenius (Dufour): Bedfordshire (VC30) (Nau, 2015).

CYDNIDAE

Legnotus limbosus (Geoffroy): Shropshire (VC40) (Fowler, 2015). Tritomegas sexmaculatus (Rambur): Middlesex (VC21) (Bantock, 2015b).

SCUTELLERIDAE

Eurygaster testudinaria (Geoffroy): Shropshire (VC40) (Fowler, 2015).

PENTATOMIDAE

Eurydema oleracea (Linnaeus): Monmouthshire (VC35) (Bantock, 2015b). *Podops inunctus* (Fabricius): South-west Yorkshire (VC63) (Bantock, 2015b). *Rhacognathus punctatus* (Linnaeus): Shropshire (VC40) (Fowler, 2015).

COREIDAE

Ceraleptus lividus Stein: South-west Yorkshire (VC63) & Nottinghamshire (VC56) (Flanagan, 2015); Shropshire (VC40) (Fowler, 2015).

Gonocerus acuteangulatus (Goeze): Leicestershire (VC55) (Bantock, 2015b).

LYGAEIDAE

Drymus pumilio Puton: South Essex (VC18) (Bantock, 2015b).

Gastrodes abietum Bergroth: Buckinghamshire (VC24) (Ryan, 2015d).

Ischnodemus sabuleti (Fallén): County Durham (VC66) (Flanagan, 2015).

Megalonotus antennatus (Schilling): South-west Yorkshire (VC63) (Flanagan, 2015).

Megalonotus chiragra (Fabricius): Shropshire (VC40) (Fowler, 2015).

Megalonotus dilatatus (Herrich-Schaeffer): Shropshire (VC40) (Fowler, 2015).

Nysius ericae (Schilling): Berkshire (VC22) (Hollier, 2015).

Nysius huttoni F.B. White: South-west Yorkshire (VC63) (Flanagan, 2015).

Orsillus depressus (Mulsant & Rey): North Hampshire (VC12) (Denton, 2015).

Peritrechus lundii (Gmelin): Shropshire (VC40) (Fowler, 2015).

Scolopostethus pictus (Schilling): Shropshire (VC40) (Fowler, 2015).

Nabidae

Himacerus boops (Schiødte): Bedfordshire (VC30) (Nau, 2015).

Nabis capsiformis Germar: West Cornwall (VC1) (Bantock, 2015a). New to Britain.

ANTHOCORIDAE

Cardiastethus fasciiventris (Garbiglietti): Buckinghamshire (VC24) (Ryan, 2015d). *Orius horvathi* (Reuter): Northamptonshire (VC32) (Bantock, 2015a). New to Britain.

MIRIDAE

Calocoris alpestris (Meyer-Dür): North Wiltshire (VC7) & Herefordshire (VC36) (Alexander, 2015).

Charagochilus gyllenhalii (Fallén): Shropshire (VC40) (Fowler, 2015).

Chlamydatus evanescens (Boheman): Hertfordshire (VC20), Warwickshire (VC38) & Bedfordshire (VC30) (Ryan, 2015f).

Chlamydatus wilkinsoni (Douglas & Scott): Shropshire (VC40) (Fowler, 2015).

Dichrooscytus gustavi Josifov: Shropshire (VC40) (Fowler, 2015).

Dicyphus annulatus (Wolff): Shropshire (VC40) (Fowler, 2015).

Dicyphus tamaninii Wagner: West Kent (VC16), South Essex (VC18) & Surrey (VC17) (Telfer, 2015). New to Britain.

Halticus apterus (Linnaeus): Shropshire (VC40) (Fowler, 2015); Buckinghamshire (VC24) (Ryan, 2015d).

Halticus luteicollis (Panzer): Buckinghamshire (VC24) (Ryan, 2015d).

Lygocoris rugicollis (Fallén): Shropshire (VC40) (Fowler, 2015).

Lygus maritimus Wagner: South-west Yorkshire (VC63) (Flanagan, 2015).

Megacoelum beckeri (Fieber): North Hampshire (VC12) (Denton, 2015).

Megalocoleus tanaceti (Fallén): Shropshire (VC40) (Fowler, 2015).

Notostira erratica (Linnaeus): Berkshire (VC22) & Buckinghamshire (VC24) (Ryan, 2015c); Warwickshire (VC38), Northamptonshire (VC32) & East Gloucestershire (VC33) (Ryan, 2015g).

Orthotylus caprai Wagner: Berkshire (VC22) and Buckinghamshire (VC24) (Ryan, 2015h).

Orthotylus junipericola Linnavuori: North Hampshire (VC12) (Denton, 2015).

Pinalitus rubricatus (Fallén): Shropshire (VC40) (Fowler, 2015).

Psallus anaemicus Seidenstucker: Northamptonshire (VC32) (Bantock, 2015a). New to Britain.

Psallus assimilis Stichel: Shropshire (VC40) (Fowler, 2015).

Psallus helenae Josifov: Northamptonshire (VC32) (Bantock, 2015a). New to Britain.

Psallus pseudoplatani Reichling: Shropshire (VC40) (Fowler, 2015).

Psallus salicis (Kirschbaum): Oxfordshire (VC23) (Ryan, 2015b).

SALDIDAE

Saldula opacula (Zetterstedt): Oxfordshire (VC23) (Ryan, 2015e). Saldula pallipes (Fabricius): Oxfordshire (VC23) (Ryan, 2015e).

GERRIDAE

Gerris lateralis Schummel: Dorset (VC9) (Bantock, 2015c).

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NEW COUNTY RECORDS OF HEMIPTERA-HETEROPTERA FROM A DATA SET PROVIDED BY RICHARD DICKSON

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Richard Dickson recently sent me an Excel spreadsheet containing 10,642 records of Hemiptera-Heteroptera which I checked against the county distribution (Ryan 2014a & 2014b). The data set was found to contain 179 new county records, which I list below. It was compiled from various sources, including D.M. Appleton's notes, the local Shield-bug Recording Scheme run by Phil Budd, and from specimens given by various friends, plus his own recording work.

Aneurus avenius (Dufour) (Aradidae)

SOUTH HAMPSHIRE (VC11): 26-Mar-83, SU3921, Emer Bog NR.

Aneurus laevis (Fabricius) (Aradidae)

SOUTH HAMPSHIRE (VC11): 10-May-01, SU5810, Wickham Common.

Acanthosoma haemorrhoidale (Linnaeus) (Acanthosomatidae)

NORTH HAMPSHIRE (VC12): 24-Apr-99, SU3835, Woolbury Ring.

Cyphostethus tristriatus (Fabricius) (Acanthosomatidae)

NORTH HAMPSHIRE (VC12): 02-Oct-83, SU7431, Noar Hill NR.

Elasmucha grisea (Linnaeus) (Acanthosomatidae)

NORTH HAMPSHIRE (VC12): 29-Apr-05, SU7624, By River Rother at Sheet.

Canthophorus impressus (Horváth) (Cydnidae)

SOUTH HAMPSHIRE (VC11): 04-Sep-71, SU60, Portsdown.

Legnotus limbosus (Geoffroy) (Cydnidae)

SOUTH HAMPSHIRE (VC11): 27-May-78, SU4806, Warsash area.

Legnotus picipes (Fallén) (Cydnidae)

SOUTH HAMPSHIRE (VC11): 03-May-06, SU398172, Lord's Wood Plantation.

Sehirus luctuosus Mulsant & Rey (Cydnidae)

NORTH HAMPSHIRE (VC12): 04-May-06, SU507292, Magdalen North Down.

Tritomegas bicolor (Linnaeus) (Cydnidae)

NORTH HAMPSHIRE (VC12): 13-Apr-79, SU425294, West Wood, Farley Mount - Entrance.

Thyreocoris scarabaeoides (Linnaeus) (Thyreocoridae)

NORTH HAMPSHIRE (VC12): 20-Aug-05, SU507292, Magdalen North Down.

Eurygaster testudinaria (Geoffroy) (Scutelleridae)

SOUTH HAMPSHIRE (VC11): 22-Aug-83, SU3921, Emer Bog NR.

SOUTH WILTSHIRE (VC8): 23-Sep-15, SU0247, Horse Down, Nr. Tilshead.

Eurydema oleracea (Linnaeus) (Pentatomidae)

NORTH HAMPSHIRE (VC12): 23-Jul-06, SU507292, Magdalen North Down.

SOUTH WILTSHIRE (VC8): 27-Jun-11, SU091461, Bustard Vedette.

Eurydema ornata (Linnaeus) (Pentatomidae)

SOUTH HAMPSHIRE (VC11): 23-May-06, SZ108914, Boscombe Chine.

Mecidea lindbergi Wagner (Pentatomidae)

SOUTH HAMPSHIRE (VC11): 18-Dec-15, SU5707, Fareham, leg. K.J.Wheeler.

Pentatoma rufipes (Linnaeus) (Pentatomidae)

SOUTH HAMPSHIRE (VC11): 04-Jul-70, SU3108, Mallard Wood, New Forest.

Piezodorus lituratus (Fabricius) (Pentatomidae)

SOUTH HAMPSHIRE (VC11): 1970, SU60, Portsdown.

Podops inunctus (Fabricius) (Pentatomidae)

NORTH HAMPSHIRE (VC12): 09-Aug-05, SU510291, Magdalen Hill Down Extension.

Troilus luridus (Fabricius) (Pentatomidae)

NORTH HAMPSHIRE (VC12): 24-Mar-02, SU505291, Magdalen Hill Down Original Reserve.

SOUTH HAMPSHIRE (VC11): 27-Aug-82, SU5206, Kites Croft.

Zicrona caerulea (Linnaeus) (Pentatomidae)

NORTH HAMPSHIRE (VC12): 28-Jan-99, SU510291, Magdalen Hill Down Extension.

Enoplops scapha (Fabricius) (Coreidae)

SOUTH HAMPSHIRE (VC11): 10-Oct-12, SZ6097, Gilkicker Point.

Chorosoma schillingii (Schilling) (Rhopalidae)

SOUTH HAMPSHIRE (VC11): 28-Aug-82, SZ6999, Sinah Common, Hayling Island.

Corizus hyoscyami (Linnaeus) (Rhopalidae)

SOUTH HAMPSHIRE (VC11): 30-Jul-06, SU372109, Trott's Copse - West.

Liorhyssus hyalinus (Fabricius) (Rhopalidae)

SOUTH HAMPSHIRE (VC11): 10-Jun-04, SU5510, Botley Wood.

Dicranocephalus medius (Mulsant & Rey) (Stenocephalidae)

SOUTH HAMPSHIRE (VC11): 01-Jun-07, SU5409, Botley Wood.

Aphanus rolandri (Linnaeus) (Lygaeidae)

NORTH HAMPSHIRE (VC12): 22-May-98, SU510291, Magdalen Hill Down Extension.

Chilacis typhae (Perris) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 1972, SU5302, Titchfield Haven NNR.

Drymus brunneus (R.F. Sahlberg) (Lygaeidae)

NORTH HAMPSHIRE (VC12): 19-Apr-84, SU5144, The Scrubs, Micheldever.

SOUTH HAMPSHIRE (VC11): 17-Jul-82, SU5613, Shedfield Common.

Drymus pumilio Puton (Lygaeidae)

ISLE OF WIGHT (VC10): 09-Mar-83, SZ5879, Luccombe Chine.

SOUTH HAMPSHIRE (VC11): 16-Sep-82, SU7118, Oxenbourne NR.

Drymus ryeii Douglas & Scott (Lygaeidae)

ISLE OF WIGHT (VC10): 22-Apr-84, SZ5986, Brading Down.

SOUTH HAMPSHIRE (VC11): 17-Jul-82, SU5613, Shedfield Common.

Drymus sylvaticus (Fabricius) (Lygaeidae)

NORTH HAMPSHIRE (VC12): 19-Apr-84, SU53, Micheldever.

SOUTH HAMPSHIRE (VC11): 16-Jan-71, SU4806, Hamble Common.

Gastrodes grossipes (De Geer) (Lygaeidae)

NORTH HAMPSHIRE (VC12): 29-Aug-05, SU350508, Tom's Wood, Wildhern.

SOUTH HAMPSHIRE (VC11): 11-Sep-82, SU30, Bishop's Dyke.

Ischnocoris angustulus (Boheman) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 11-Jul-82, SZ5799, Browndown Coastal Ranges.

Ischnodemus sabuleti (Fallén) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 26-Jun-82, SU5309, Botley Wood.

SOUTH WILTSHIRE (VC8): 08-Sep-08, SU0348, 1 km North of Tilshead.

Megalonotus antennatus (Schilling) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 13-Jan-83, SU5409, Botley Wood.

Megalonotus chiragra (Fabricius) (Lygaeidae)

ISLE OF WIGHT (VC10): 17-Mar-84, SZ68, Red Cliff.

NORTH HAMPSHIRE (VC12): 19-Apr-84, SU53, Micheldever.

SOUTH HAMPSHIRE (VC11): 25-Mar-73, SU60, Portsdown.

Megalonotus sabulicola (Thomson) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 28-Aug-82, SZ6999, Sinah Common, Hayling Island.

Nysius ericae (Schilling) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 24-Jul-82, SZ6999, Sinah Common, Hayling Island.

Peritrechus lundii (Gmelin) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 16-May-10, SU3306, Denny Wood, New Forest.

Peritrechus nubilus (Fallén) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 07-Aug-82, SZ5899, Browndown north.

Scolopostethus affinis (Schilling) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 22-Jul-82, SU4905, Warsash shore.

Scolopostethus decoratus (Hahn) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 10-Jul-82, SU3605, Fernycroft and area, New Forest.

Scolopostethus grandis Horváth (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 10-Mar-07, SU6006, Portsdown NR.

Scolopostethus thomsoni Reuter (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 26-Jun-82, SU5309, Botley Wood.

Stygnocoris fuligineus (Geoffroy) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 18-Jul-82, SU4806, Hamble Common.

Stygnocoris sabulosus (Schilling) (Lygaeidae)

NORTH HAMPSHIRE (VC12): 19-Apr-84, SU53, Micheldever.

SOUTH HAMPSHIRE (VC11): 01-Aug-66, SU7118, Oxenbourne NR.

Taphropeltus contractus (Herrich-Schaeffer) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 18-Jul-82, SU4905, Warsash shore.

Trapezonotus arenarius (Linnaeus) (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 02-Jun-03, SU5010, Swanwick NR.

Trapezonotus desertus Seidenstücker (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 04-Jul-11, SU3306, Denny Wood NOS, New Forest.

SOUTH WILTSHIRE (VC8): 25-Jun-12, SU1845, Bulford Field (& Dumbell Copse).

Trapezonotus dispar Stål (Lygaeidae)

SOUTH HAMPSHIRE (VC11): 02-Jun-03, SU5010, Swanwick NR.

WEST SUSSEX (VC13): 15-Aug-11, SU9807, Rewell Wood, W. of Arundel.

Berytinus clavipes (Fabricius) (Berytidae)

SOUTH HAMPSHIRE (VC11): 24-Jul-82, SZ6999, Sinah Common, Hayling Island.

Berytinus hirticornis (Brullé) (Berytidae)

SOUTH HAMPSHIRE (VC11): 25-Aug-03, SU5103, Brownwich cliffs.

Berytinus montivagus (Meyer-Dür) (Berytidae)

SOUTH HAMPSHIRE (VC11): 25-Jul-82, SU60, Portsdown.

Berytinus signoreti (Fieber) (Berytidae)

SOUTH HAMPSHIRE (VC11): 04-Jul-82, SU7118, Oxenbourne NR.

Campylosteira verna (Fallén) (Tingidae)

SOUTH HAMPSHIRE (VC11): 17-Apr-01, SU6207, Portsdown.

Catoplatus fabricii (Stål) (Tingidae)

SOUTH HAMPSHIRE (VC11): 27-May-13, SU5309, Lee Ground Coppice, Botley Wood.

Dictyla convergens (Herrich-Schaeffer) (Tingidae)

SOUTH HAMPSHIRE (VC11): 20-May-84, SU5516, The Moors NR.

Dictyonota fuliginosa A. Costa (Tingidae)

SOUTH HAMPSHIRE (VC11): 27-Feb-71, SU5103, Brownwich cliffs.

Kalama tricornis (Schrank) (Tingidae)

SOUTH HAMPSHIRE (VC11): 19-Jul-82, SU4806, East bank of Hamble estuary.

Stephanitis takeyai Drake & Maa (Tingidae)

SOUTH HAMPSHIRE (VC11): 07-Jul-13, SU5503, Stubbington, leg. Dan Houghton.

Tingis cardui (Linnaeus) (Tingidae)

SOUTH HAMPSHIRE (VC11): 04-Aug-82, SU7118, Oxenbourne NR.

Coranus woodroffei P.V. Putshkov (Reduviidae)

SOUTH HAMPSHIRE (VC11): 13-Sep-10, SU3306, Denny Wood, New Forest.

WEST SUFFOLK (VC26): 13-Jul-13, TL787715, Ramparts Field.

Himacerus boops (Schiødte) (Nabidae)

SOUTH HAMPSHIRE (VC11): 08-Aug-66, SU7118, Oxenbourne NR.

Himacerus major (A. Costa) (Nabidae)

SOUTH HAMPSHIRE (VC11): 11-Jul-82, SZ6097, Gilkicker Point.

Nabis ericetorum Scholtz (Nabidae)

SOUTH HAMPSHIRE (VC11): 01-Aug-82, SU4806, Hamble Common.

Nabis ferus (Linnaeus) (Nabidae)

SOUTH HAMPSHIRE (VC11): 28-Jul-82, SU5005, Warsash Common.

Nabis flavomarginatus Scholtz (Nabidae)

SOUTH HAMPSHIRE (VC11): 1970, SU60, Portsdown.

Nabis limbatus Dahlbom (Nabidae)

SOUTH HAMPSHIRE (VC11): 23-Sep-66, SU7118, Oxenbourne NR.

Nabis lineatus Dahlbom (Nabidae)

SOUTH HAMPSHIRE (VC11): 18-Jul-82, SU4806, East bank of Hamble estuary.

Nabis rugosus (Linnaeus) (Nabidae)

SOUTH HAMPSHIRE (VC11): 23-Sep-66, SU7118, Oxenbourne NR.

Anthocoris confusus Reuter (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 29-Aug-82, SU5516, The Moors NR.

Anthocoris nemoralis (Fabricius) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 10-May-01, SU5804, Gosport.

Anthocoris nemorum (Linnaeus) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 01-Jun-66, SU7118, Oxenbourne NR.

Anthocoris sarothamni Douglas & Scott (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 01-Jun-09, SZ5799, Browndown Coastal Ranges.

Buchananiella continua (F.B. White) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 04-Mar-02, SU5010, Swanwick NR.

Cardiastethus fasciiventris (Garbiglietti) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 12-May-02, SU5010, Swanwick NR.

Dufouriellus ater (Dufour) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 03-Jun-11, SU579069, Fareham.

Lyctocoris campestris (Fabricius) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 08-Aug-82, SU5406, Catisfield.

Orius laevigatus (Fieber) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 28-Jul-03, SU5810, Wickham Common.

SOUTH WILTSHIRE (VC8): 29-Aug-11, SU1845, Bulford Field (& Dumbell Copse).

Orius majusculus (Reuter) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 04-May-08, SU5302, Titchfield Haven NNR.

Orius vicinus (Ribaut) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 02-Aug-11, SU579069, Fareham.

Xylocoris cursitans (Fallén) (Anthocoridae)

SOUTH HAMPSHIRE (VC11): 24-Jun-09, SU5409, Botley Wood.

Loricula exilis (Fallén) (Microphysidae)

SOUTH HAMPSHIRE (VC11): 30-Jun-08, SU5302, Titchfield Haven NNR.

Amblytylus brevicollis Fieber (Miridae)

SOUTH HAMPSHIRE (VC11): 18-Jun-06, SU5810, Wickham Common.

Apolygus spinolae (Meyer-Dür) (Miridae)

NORTH HAMPSHIRE (VC12): 06-Aug-09, SU3636, Leckford Estate.

Asciodema obsoleta (Fieber) (Miridae)

 $SOUTH\ HAMPSHIRE\ (VC11):\ 23-Jun-03,\ SU5810,\ Common\ Meadow.$

Blepharidopterus angulatus (Fallén) (Miridae)

SOUTH HAMPSHIRE (VC11): 10-Aug-82, SU5410, Botley Wood.

Brachyarthrum limitatum Fieber (Miridae)

SOUTH HAMPSHIRE (VC11): 14-Jul-04, SU5810, Wickham Common.

Calocoris roseomaculatus (De Geer) (Miridae)

SOUTH HAMPSHIRE (VC11): 08-Aug-66, SU7118, Oxenbourne NR.

Campyloneura virgula (Herrich-Schaeffer) (Miridae)

SOUTH HAMPSHIRE (VC11): 04-Jul-82, SU5309, Botley Wood.

Capsus ater (Linnaeus) (Miridae)

SOUTH HAMPSHIRE (VC11): 01-Jun-82, SU5510, Botley Wood.

Closterotomus fulvomaculatus (De Geer) (Miridae)

SOUTH HAMPSHIRE (VC11): 30-Jun-83, SU5206, Kites Croft.

Cyllecoris histrionius (Linnaeus) (Miridae)

SOUTH HAMPSHIRE (VC11): 01-Jun-82, SU5510, Botley Wood.

Deraeocoris lutescens (Schilling) (Miridae)

SOUTH HAMPSHIRE (VC11): 16-Aug-82, SU5309, Botley Wood.

Deraeocoris ruber (Linnaeus) (Miridae)

NORTH HAMPSHIRE (VC12): 06-Aug-09, SU3636, Leckford Estate.

SOUTH HAMPSHIRE (VC11): 14-Jul-82, SU5410, Botley Wood.

Dichrooscytus gustavi Josifov (Miridae)

SOUTH HAMPSHIRE (VC11): 25-Jul-10, SU579069, Fareham.

Dicyphus annulatus (Wolff) (Miridae)

SOUTH HAMPSHIRE (VC11): 24-Jul-82, SZ6999, Sinah Common, Hayling Island.

Dicyphus epilobii Reuter (Miridae)

NORTH HAMPSHIRE (VC12): 06-Aug-09, SU3636, Leckford Estate.

SOUTH HAMPSHIRE (VC11): 10-Aug-82, SU5309, Botley Wood.

Dicyphus pallicornis (Fieber) (Miridae)

SOUTH HAMPSHIRE (VC11): 08-Jul-07, SU577071, Fareham.

SOUTH WILTSHIRE (VC8): 23-Jul-12, SU0348, 1 km North of Tilshead.

Europiella artemisiae (Becker) (Miridae)

SOUTH HAMPSHIRE (VC11): 22-Jul-01, SU5206, Kites Croft.

Grypocoris stysi (Wagner) (Miridae)

SOUTH HAMPSHIRE (VC11): 29-Jun-83, SU5809, Carpenter's Copse / Homerhill Copse.

Halticus luteicollis (Panzer) (Miridae)

SOUTH HAMPSHIRE (VC11): 14-Jul-82, SU5310, Botley Wood.

Harpocera thoracica (Fallén) (Miridae)

NORTH HAMPSHIRE (VC12): 05-Jun-11, SU7553, Odiham Common.

Heterotoma planicornis (Pallas) (Miridae)

SOUTH HAMPSHIRE (VC11): 01-Aug-66, SU7118, Oxenbourne NR.

Hypseloecus visci (Puton) (Miridae)

SOUTH WILTSHIRE (VC8): 07-Jul-09, SU152294, Salisbury, Waterloo Street.

Leptopterna dolabrata (Linnaeus) (Miridae)

SOUTH HAMPSHIRE (VC11): 04-Jul-82, SU5309, Botley Wood.

Leptopterna ferrugata (Fallén) (Miridae)

NORTH HAMPSHIRE (VC12): 05-Jun-11, SU7553, Odiham Common.

Liocoris tripustulatus (Fabricius) (Miridae)

SOUTH HAMPSHIRE (VC11): 01-Jun-66, SU7118, Oxenbourne NR.

Lygocoris rugicollis (Fallén) (Miridae)

SOUTH HAMPSHIRE (VC11): 11-Jun-01, SU5810, Wickham Common.

Lygus rugulipennis Poppius (Miridae)

NORTH HAMPSHIRE (VC12): 06-Aug-09, SU3636, Leckford Estate.

SOUTH HAMPSHIRE (VC11): 20-Jul-00, SU579069, Fareham.

Macrolophus rubi Woodroffe (Miridae)

SOUTH HAMPSHIRE (VC11): 11-Jul-06, SU579069, Fareham.

Macrotylus solitarius (Meyer-Dür) (Miridae)

SOUTH HAMPSHIRE (VC11): 26-Jul-83, SU7118, Oxenbourne NR.

Miridius quadrivirgatus (A. Costa) (Miridae)

SOUTH HAMPSHIRE (VC11): 21-Jul-00, SU579069, Fareham.

Miris striatus (Linnaeus) (Miridae)

NORTH HAMPSHIRE (VC12): 05-Jun-11, SU7253, Bartley Heath nr Hook.

SOUTH HAMPSHIRE (VC11): 11-Jun-70, SU51, Botley Wood.

Monalocoris filicis (Linnaeus) (Miridae)

SOUTH HAMPSHIRE (VC11): 10-Aug-82, SU5310, Botley Wood.

Neolygus populi (Leston) (Miridae)

SOUTH HAMPSHIRE (VC11): 30-May-11, SU5905, Cams Bay and wood.

Notostira elongata (Geoffroy) (Miridae)

SOUTH HAMPSHIRE (VC11): 04-Jul-82, SU5309, Botley Wood.

Oncotylus viridiflavus (Goeze) (Miridae)

SOUTH HAMPSHIRE (VC11): 06-Aug-82, SU5509, Botley Wood.

SOUTH WILTSHIRE (VC8): 29-Aug-08, SU1845, Bulford Field (& Dumbell Copse).

Orthocephalus coriaceus (Fabricius) (Miridae)

SOUTH HAMPSHIRE (VC11): 18-Jul-82, SU5309, Botley Wood.

Orthops basalis (A. Costa) (Miridae)

NORTH HAMPSHIRE (VC12): 06-Aug-09, SU3636, Leckford Estate.

SOUTH HAMPSHIRE (VC11): 13-Aug-09, SU6121, Exton area.

Orthops campestris (Linnaeus) (Miridae)

DORSET (VC9): 12-Aug-10, SY7681, Burning Cliffs, Ringstead Bay, National Trust.

SOUTH HAMPSHIRE (VC11): 25-Aug-83, SZ5899, Browndown north.

SOUTH WILTSHIRE (VC8): 29-Aug-08, SU1845, Bulford Field (& Dumbell Copse).

Orthotylus adenocarpi (Perris) (Miridae)

SOUTH HAMPSHIRE (VC11): 04-Jul-04, SU5510, Botley Wood.

Orthotylus marginalis Reuter (Miridae)

SOUTH HAMPSHIRE (VC11): 04-Jul-01, SU579069, Fareham.

Orthotylus ochrotrichus Fieber (Miridae)

NORTH HAMPSHIRE (VC12): 06-Aug-09, SU3636, Leckford Estate.

SOUTH HAMPSHIRE (VC11): 01-Jul-03, SU5905, Cams Bay and wood.

Orthotylus virescens (Douglas & Scott) (Miridae)

SOUTH HAMPSHIRE (VC11): 29-Aug-01, SU5309, Botley Wood.

Pantilius tunicatus (Fabricius) (Miridae)

SOUTH HAMPSHIRE (VC11): 27-Aug-82, SU5206, Kites Croft.

Phylus coryli (Linnaeus) (Miridae)

SOUTH HAMPSHIRE (VC11): 24-Jul-83, SU5310, Botley Wood.

Pithanus maerkelii (Herrich-Schaeffer) (Miridae)

SOUTH HAMPSHIRE (VC11): 04-Jul-82, SU5410, Botley Wood.

Plagiognathus arbustorum (Fabricius) (Miridae)

SOUTH HAMPSHIRE (VC11): 01-Aug-66, SU7118, Oxenbourne NR.

Polymerus nigrita (Fallén) (Miridae)

SOUTH HAMPSHIRE (VC11): 18-Jul-82, SU5310, Botley Wood.

Polymerus palustris (Reuter) (Miridae)

SOUTH HAMPSHIRE (VC11): 09-Jul-83, SU3921, Emer Bog NR.

Psallus albicinctus (Kirschbaum) (Miridae)

SOUTH HAMPSHIRE (VC11): 31-May-02, SU5810, Common Meadow.

Psallus betuleti (Fallén) (Miridae)

SOUTH HAMPSHIRE (VC11): 25-May-07, SU5409, Leachpond Copse, Botley Wood.

Psallus confusus Rieger (Miridae)

SOUTH HAMPSHIRE (VC11): 28-Jun-02, SU5810, Wickham Common.

Psallus flavellus Stichel (Miridae)

SOUTH HAMPSHIRE (VC11): 12-Jul-07, SU5409, Botley Wood.

Psallus haematodes (Gmelin) (Miridae)

SOUTH HAMPSHIRE (VC11): 29-Aug-01, SU5309, Botley Wood.

Psallus luridus Reuter (Miridae)

SOUTH HAMPSHIRE (VC11): 26-Jul-07, SU5409, Botley Wood.

Psallus mollis (Mulsant & Rey) (Miridae)

SOUTH HAMPSHIRE (VC11): 29-Jun-07, SU6012, West Walk (High Lines).

Psallus montanus Josifov (Miridae)

SOUTH HAMPSHIRE (VC11): 29-Jun-01, SU5810, Wickham Common.

Psallus perrisi (Mulsant & Rey) (Miridae)

SOUTH HAMPSHIRE (VC11): 31-May-02, SU5810, Wickham Common.

Psallus wagneri Ossiannilsson (Miridae)

SOUTH HAMPSHIRE (VC11): 31-May-02, SU5810, Common Meadow.

Pseudoloxops coccineus (Meyer-Dür) (Miridae)

SOUTH HAMPSHIRE (VC11): 07-Aug-00, SU579069, Fareham.

Salicarus roseri (Herrich-Schaeffer) (Miridae)

SOUTH HAMPSHIRE (VC11): 19-Jul-86, SU3614, Lower Test NR.

Stenodema calcarata (Fallén) (Miridae)

SOUTH HAMPSHIRE (VC11): 07-Jul-82, SU5309, Botley Wood.

Stenodema laevigata (Linnaeus) (Miridae)

SOUTH HAMPSHIRE (VC11): 01-Jun-66, SU7118, Oxenbourne NR.

Stenotus binotatus (Fabricius) (Miridae)

SOUTH HAMPSHIRE (VC11): 14-Jun-70, SU60, Portsdown.

Trigonotylus caelestialium (Kirkaldy) (Miridae)

SOUTH HAMPSHIRE (VC11): 01-Aug-03, SU5516, The Moors NR.

Saldula palustris (Douglas) (Saldidae)

DORSET (VC9): 20-Jul-09, SY4491, Eype's Mouth, coastal cliffs, National Trust, Eype.

SOUTH HAMPSHIRE (VC11): 14-Jul-01, SU4806, Hamble Common.

Saldula saltatoria (Linnaeus) (Saldidae)

SOUTH HAMPSHIRE (VC11): 11-Jun-01, SU5206, Kites Croft.

Mesovelia furcata Mulsant & Rey (Mesoveliidae)

SOUTH HAMPSHIRE (VC11): 01-Sep-84, SU3601, Hatchet Pond.

Callicorixa wollastoni (Douglas & Scott) (Corixidae)

SOUTH HAMPSHIRE (VC11): 10-Aug-03, SU579069, Fareham.

Micronecta scholtzi (Fieber) (Corixidae)

SOUTH HAMPSHIRE (VC11): 2002, SU5010, Swanwick NR.

I am most grateful to Richard for sharing his records with me, for giving permission for them to be published in this journal, and for checking and correcting a draft copy of this paper.

- Ryan, R. P. 2014a. The county distribution of the Hemiptera-Heteroptera of the British Isles, fourth edition. *Hemipterist* 1: 38-103.
- Ryan, R. P. 2014b. An Atlas of the Hemiptera-Heteroptera of the British Isles. https://sites.google.com/site/BritishHetBugAtlas.

AN UP-TO-DATE LIST OF COUNTY RECORDS NOW AVAILABLE ONLINE

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One problem with distributional studies is that they go out of date almost as soon as they are published, as the relentless process of recording continues apace. As a consequence, in the particular case of the county distribution of the Hemiptera-Heteroptera (Ryan, 2014a & 2014b), the checking of putative new county records is a combined process of consulting the county distribution and searching the subsequent literature. This journal features a 'county record roundup' in each volume, gathering together all the new county records published elsewhere, so that only this journal needs to be searched. However, it would be useful if the county distribution itself could be updated every six months, as each issue of the journal is published, so that this journal need not be searched either.

Alas, with each county division (Ryan, 2015a, 2015b, 2016a, 2016b & 2016d), the number of (vice-)counties increases, the cross-tabulation of Ryan (2014a) has to expand, and the base map of Ryan (2014b) has to be altered. To do this on an ongoing basis would take up too much time, and is best left until the county divisions are complete, and the cross-tabulation and base map become stable. However, in the interim, I will publish on the internet an Excel spreadsheet listing the up-to-date county record list, with each issue of this journal. This list can be downloaded from the webpage of the Atlas of the Hemiptera-Heteroptera of the British Isles (Ryan, 2014b, https://sites.google.com/site/britishhetbugatlas) by clicking on the link provided.

The first 12,953 records listed are those of the county distribution, fourth edition (Ryan, 2014a), followed by those subsequently published in this journal, issue by issue. I have not removed those records of the county distribution which have been superseded by vice-county-specific records arising from county divisions, in case the user needs the old historic county records for some purpose. Instead, these are marked '[DELETED]' against the county name. There are three records in the county distribution which have been deleted due to published corrections (Ryan, 2015c & 2016c). These are marked '[DELETED]' against the species name.

The checking of large numbers of putative new county records can still be a tedious process, even with a regularly updated county record list. However, I have software that can automate this process, comparing the county record list with a supplied spreadsheet of records and producing a list of those records from the spreadsheet that are new to the county distribution. This software is not in a form that can be distributed to users, as some manual intervention is required when running it, but I would be happy to receive spreadsheets from readers and provide a list of confirmed new county records in return. The software can also produce a skeleton paper for publication, if this is of interest. Several papers in this issue of the journal contain new county records obtained in this way (Ryan, 2016d, 2016e & 2016f).

- Ryan, R. P. 2014a. The county distribution of the Hemiptera-Heteroptera of the British Isles, fourth edition. *Hemipterist* 1: 38-103.
- Ryan, R. P. 2014b. An Atlas of the Hemiptera-Heteroptera of the British Isles. https://sites.google.com/site/BritishHetBugAtlas.
- Ryan, R. P. 2015a. The division of Ryan's county list of Hemiptera-Heteroptera for Cornwall into vice-county lists for VC1 and VC2. *Hemipterist* 2: 12-20.
- Ryan, R. P. 2015b. The division of Ryan's county list of Hemiptera-Heteroptera for Gloucestershire into vice-county lists for VC33 and VC34. *Hemipterist* **2**: 30-39.
- Ryan, R. P. 2015c. Additions to Ryan's county lists of Hemiptera-Heteroptera for Carmarthenshire, Pembrokeshire and Cardiganshire. *Hemipterist* **2**: 40-45.
- Ryan, R. P. 2016a. The division of Ryan's list of Hemiptera-Heteroptera for Ireland into vice-county lists for H1 to H40. *Hemipterist* **3**: 19-38.

- Ryan, R. P. 2016b. The division of Ryan's list of Hemiptera-Heteroptera for Hampshire into vice-county lists for VC10, VC11 and VC12. *Hemipterist* **3**: 39-53.
- Ryan, R. P. 2016c. *Nabis pseudoferus* Remane (Hemiptera: Nabidae) deleted from the Oxfordshire list. *Hemipterist* **3**: 72.
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ANTHOCORIS MINKI DOHRN (HEMIPTERA: ANTHOCORIDAE) NEW TO OXFORDSHIRE AND BERKSHIRE

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This animal was first reported from Britain by Jessop (1983), the *Anthocoris minki* of Southwood & Leston (1959) being *Anthocoris simulans* Reuter. The insect is categorised as RDB3 by Kirby (1992), and it has so far been reported from only four counties (Figure 1). The scant nature of the known distribution is perhaps due, at least in part, to its cryptic habit of living within the leaf-petiole galls of poplar, *Populus* spp. (Salicaceae), requiring a specific and determined attempt to record it.

In the autumn of 2014 I took on this challenge in Oxford, targeting the Lombardy Poplar, *Populus nigra* var. *italica*, of University Parks (National Grid Reference SP516072). A casual approach of breaking open a few galls each time I passed the trees on my way elsewhere had not been rewarded in the past, so clearly a bulk approach was called for. Therefore, on 26 September 2014, I collected 161 galls for later examination at home. I was delighted to find two adults and six nymphs of *A. minki* amongst my haul, thereby recording the insect new to Oxfordshire. The nymphs were reared to adult to confirm their identity (Figure 2).

Flushed with success, I set off three days later into Watsonian Berkshire in an attempt to add this county to the insect's known distribution. 164 galls were collected from a row of Lombardy Poplar along a field margin near Long Wittenham (SU560938); a further 164 were gathered from examples of the same tree by a roadside in Sutton Courtney (SU511943); and 248 from Steventon (SU466922), also from Lombardy Poplar. At home, I found none of the insect in the galls from Long Wittenham, although I had taken a specimen of the bug from the arm of my jacket whilst collecting. However, Sutton Courtney produced five adults and two nymphs from the galls, and Steventon one adult and six nymphs. Clearly, Berkshire is also part of the bug's distribution.

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- Ryan, R. P. 2014a. The county distribution of the Hemiptera-Heteroptera of the British Isles, fourth edition. *Hemipterist* 1: 38-103.
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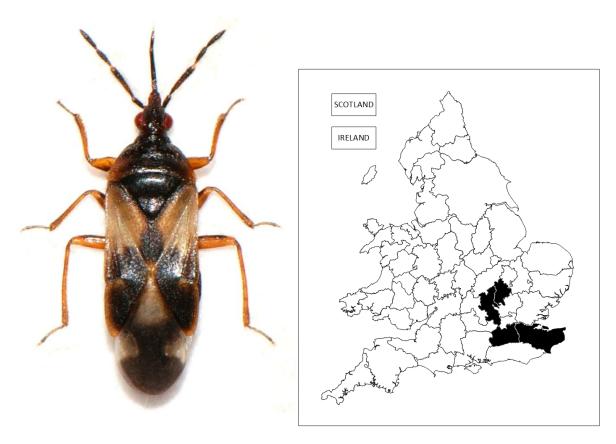


FIGURE 1. Anthocoris minki and its county distribution (Ryan, 2014a & 2014b).



FIGURE 2. Nymphs of *Anthocoris minki* taken from leaf-petiole galls of Lombardy Poplar.

CLOSTEROTOMUS TRIVIALIS (A. COSTA) (HEMIPTERA: MIRIDAE) MASSING ON HONEY LOCUST IN UNIVERSITY PARKS, OXFORD

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I recently wrote on the discovery of a breeding colony of this species (Figure 1) in New Marston Meadows, Oxford (Ryan, 2015), the first to be reported outside the London area. However, the animal was found only in small numbers, and the 'massings' found in gardens of the capital (Bantock, 2010a & 2010b) had not been reported from anywhere else.

I was therefore delighted to chance upon several dozen adults of the bug on a single tree as I walked through University Parks, Oxford (National Grid Reference SP514074) on 20 June 2015, about 500m from the New Marston captures, over the River Cherwell. The tree was labelled 'NW9', and the University Parks website (http://www.parks.ox.ac.uk/tree) revealed its identity to be Honey Locust 'Sunburst', Gleditsia triacanthos L. f. inermis (Caesalpiniaceae). The insects were conspicuous on the foliage, and were apt to fly or run around the other sides of the leaves when approached.



FIGURE 1. Closterotomus trivialis male (left) and female (right).

Beating other trees in the area produced no more of the bug, until my walk took me into New Marston Meadows, where I obtained a singleton from White willow, *Salix alba* L. (Saliceceae). That evening, I found a specimen of *C. trivialis* sweeping the unkempt area of my Oxford garden (SP510068). I immediately suspected that this was a false record, the bug having been carried in my collecting equipment from earlier in the day. However, when I emptied the flight interception traps (Figure 2) I had been running in my garden over recent weeks, I found another specimen of the

animal, which given its rather soggy state, had clearly been there for some time. Furthermore, when I next emptied the traps, two weeks later, another specimen of *C. trivialis* was found.

In the following year, on 17 May, I revisited the Honey Locust in an attempt to find nymphs, and establish this as a host plant for the species. I found none. However, by beating other plants along the North Walk and West Walk of University Parks, I did find immatures on several other hosts, only three of which could be readily identified: Leyland Cypress, *x Cupressocyparis leylandii* (Jacks. Dallim.) Dallim. (Cupressaceae); Box, *Buxus sempervirens* L. (Buxaceae); and Rosemary, *Rosemarinus officinalis* L. (Lamiaceae). The last plant also produced a specimen of the Rosemary Beetle, *Chrysolina americana* (Linnaeus) (Chrysomelidae) which was promptly reported to the Royal Horticultural Society (https://www.rhs.org.uk/advice/profile?PID=555#section-2).

Three days later I visited Hinksey Park (SP514049), on the other side of the River Thames in Oxford, expecting to add Watsonian Berkshire to the bug's known distribution. Alas, in spite of a thorough search, none of the animal was found. Clearly, although the bug is now common in Oxford, there are still limits to the bug's distribution.

References

Bantock, T. M., 2010a. Closterotomus trivialis (Costa) in north London. Het News 15: 3.

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Ryan, R. P. 2014a. The county distribution of the Hemiptera-Heteroptera of the British Isles, fourth edition. *Hemipterist* 1: 38-103.

Ryan, R. P. 2014b. An Atlas of the Hemiptera-Heteroptera of the British Isles. https://sites.google.com/site/BritishHetBugAtlas.

Ryan, R. P. 2015. *Closterotomus trivialis* (A. Costa) (Hemiptera: Miridae) established in Oxford. *British Journal of Entomology and Natural History* **28**: 99.

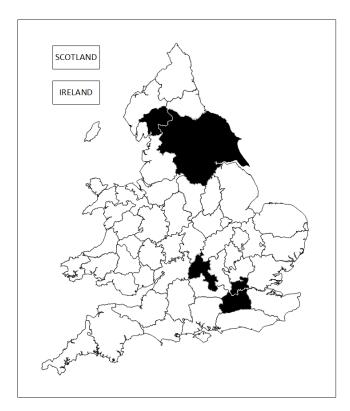




FIGURE 2. The county distribution of *Closterotomus trivialis* (Ryan, 2014a & 2014b) and one of the flight interception traps installed in my garden (right).

SPECIES ACCOUNTS FOR THE HEMIPTERA-HETEROPTERA REPORTED AS NEW TO THE BRITISH ISLES SINCE SOUTHWOOD & LESTON (1959): 1980 TO 1992

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Introduction

This is the third instalment of species accounts, which expand upon the Addendum to Southwood & Leston (1959) (Ryan, 2012a). The previous instalments (Ryan, 2015e & 2016c) covered the species announced as new to the British Isles in the period 1959 to 1979, which is here extended by another 13 years to 1992. As before, the species accounts are based upon details published in the national entomological literature up to the present time.

The numbering of the species accounts follows those of Ryan (2012a), which places them within the taxonomic sequence of Southwood & Leston (1959). Details of identification are given, but figures from published articles are not reproduced. A full set of keys is provided by Savage (1989), Nau (2012) and Kirby (2015). Images for the bugs may be found at the British Bugs website (www.britishbugs.org.uk) and elsewhere on the internet, such as Flickr (www.flickr.com). County distribution maps for the new species are given in Figure 1. References are not cited within the species accounts, in order to avoid cluttering the prose. The evidence base for the accounts is instead given in an annotated bibliography.

Species accounts

290B Tuponia mixticolor (A. Costa) (Miridae), formerly Tuponia carayoni Wagner

This capsid bug was first found in the British Isles by B. S. Nau on 17 August 1979 on tamarisk at the beach car park, Freshwater, Isle of Wight.

Subsequently, it has been found in Middlesex and all the southern coastal counties from Suffolk to Devon; adults occurring in each of the months from June to October. The bug is usually taken on its host plant, tamarisk, but it has also been taken at light.

This insect is distinctive in its small, mottled appearance and is unlikely to be confused with any other British bug, especially when found on its host plant.

198B. Anthocoris amplicollis Horváth (Anthocoridae)

R. Crossley was the first to find this flower bug in the British Isles, on 25 August 1979 on ash at Lowna, near Kirbymoorside, North Yorkshire. Further specimens were taken on ash at nearby locations in June and August 1980; and a specimen was found in a collection taken on ash in the same area in July 1978.

Since then, only three more records have been published, adding the counties of Surrey (September 1995 on oak), Northamptonshire (2007) and Oxfordshire (September 2009) to its known distribution.

The insect keys out to *Anthocoris confusus* Reuter in Southwood & Leston (1959), but it is larger and darker than this species. It can be distinguished from all other British *Anthocoris* Fallén by the shape of the pronotum, being less constricted towards the front, so that lines continuing the margins forwards cross in front of the head. The anterior angles of the pronotum are rounded and explanate. Given the rarity of records, from both fieldwork and the re-examination of collections, it is unlikely that there has been significant confusion in previous records for other species of *Anthocoris*.

198C Anthocoris minki Dohrn (Anthocoridae)

This species is confused with *Anthocoris simulans* Reuter in Southwood & Leston (1959), and the description given under the former name applies to the latter species. The genuine *A. minki* was first reported in the British Isles by L. Jessop, having been discovered in leaf-petiole galls collected in

August 1980 by V. F. Eastrop from Lombardy Poplar growing along the towpath at Kew, London (Surrey). The bug lives within the galls, feeding upon the aphids that form them.

The animal has since been recorded from the additional counties of Kent, Buckinghamshire, Bedfordshire, Cambridgeshire, Oxfordshire and Berkshire in July, August and September. Nymphs have been reported in August and September.

The bug is similar to the ash-dwelling *A. simulans*, but identification can be confirmed by examination of the male genitalia. All records for *A. minki* prior to Jessop's report should be regarded as referring to *A. simulans*. There is no evidence of confusion between the two species subsequently, and there have been no reports of old records for genuine *A. minki* from specimens in collections.

075B Nysius graminicola (Kolenati) (Lygaeidae)

On 5 May 1977, A. A. Allen made the first record of this bug in the British Isles, under heather at Studland, Dorset. However, it was another 24 years before the species was found again in these islands, in Hampshire.

Subsequently, it has been recorded from the additional counties of Hertfordshire, Oxfordshire and Sussex, adults being found in the months of August, September and October. The animal is often swept from sparsely vegetated sites, such as waste ground, and at the coast.

The insect is separated from its congeners by having a dark basal ring on the second antennal segment. *Nysius senecionis* (Schilling) also has this feature, but in this animal the basal segment of the hind tarsus is shorter than the other two segments and claws combined.

442B Saldula connemarae Walton (Saldidae)

This shore bug was reported as new to science by G. A. Walton in 1986 from specimens found among the rocks and boulders by the edge of the low-lying lakes of Connemara, West Galway. The species has not been reported from anywhere else in the British Isles.

The insect occurs as dark and pale forms. The latter closely resemble *Saldula saltatoria* (Linnaeus), but are slightly stouter, with the posterior tibiae longer than the antennae. There are also differences in the male genitalia.

076A Orsillus depressus (Mulsant & Rey) (Lygaeidae)

This seed bug was first found in the British Isles on 27 September 1987 by R. D. Hawkins in Woking, Surrey on Lawson's Cypress growing in a garden.

The insect has since been reported form twelve more counties in southern England. Adults have been taken in every month from April to October, except July. Most records are from Lawson's Cypress in urban areas.

The insect is very distinctive and cannot be confused with any other British species. It is the only member of the Lygaeidae associated with Lawson's Cypress.

488A Corixa iberica Jansson (Corixidae)

This water bug was separated from *Corixa punctata* (Illiger) in 1981, and in 1989 A. A. Savage reported its known distribution as north-western Ireland, western Scotland, Orkney and Shetland.

The two species are very similar in appearance, but can be distinguished by examination of the right paramere. Correct identification may be frustrated by variation in both species, some individuals tending to an intermediate condition. Hybridisation between the two species has been suggested.

Specimens of *C. iberica* have been found in museum collections standing as *C. punctata*, some dating from the nineteenth century. Clearly, old records for *C. punctata* from the aforementioned regions need to checked by tracing to a specimen. However, in regard to the County Distribution, given that this study has not divided Scotland and Ireland into separate regions, and that *C. punctata* is a widespread species in both countries, there is no need to regard any of the records of the County Distribution as doubtful in regard to this species.

093B Megalonotus emarginatus (Rey) (Lygaeidae)

This ground bug was first reported from the British Isles in 1992 by B. Aukema and B. S. Nau, specimens of the species having been found in the collections of the British Museum (Natural History) standing over the genus *Megalonotus* Fieber, some of which dated from the 19th Century.

The specimen labels indicated collection in the counties of Berkshire, Dorset, Essex and Kent, in the months of March, May, June, August and September.

Since then there have been further records, in the field and from specimens in collections, for the counties of Oxfordshire, Yorkshire, Bedfordshire, Cornwall, Worcestershire and Warwickshire, adding the month of July to the species' seasonal distribution. The insect has been taken on the ground, in some cases from litter.

The species is distinguished from *Megalonotus chiragra* (Fabricius) and *Megalonotus sabulicola* (Thomson) by the shape of the pronotum. In *M. emarginatus*, the hind corners protrude posteriorly, so that the hind margin is not a regular curve, as it is in the other two species. The species has clearly been confused with its congeners, but it is not clear which of these are involved in the confusion. Presumably, old records for *M. chiragra* should be discounted unless traced to a specimen, but these have already been removed from the County Distribution on account of the earlier confusion with *M. sabulicola*. Whether prior records for *M. sabulicola* should now also be discounted is unclear from the literature.

418A Trigonotylus caelestialium (Kirkaldy) (Miridae)

This grass bug was first reported from the British Isles in 1992 by B. Aukema and B. S. Nau, specimens of the species having been found in the collections of the British Museum (Natural History) standing over the genus *Trigonotylus* Fieber, the earliest from the year 1900. The specimen labels indicated collection in the counties of Middlesex and Surrey, in the months of June and August.

The counties of Kent, Sussex, Berkshire, Oxfordshire, Buckinghamshire, Gloucestershire, Cornwall, Warwickshire and Yorkshire have since been added to its known distribution, collecting in the months of June, July, August and September. Where stated, these were taken by sweeping various habitats: salt marsh, wet meadow, woodland clearing, heathland, chalk hills, and derelict ground. The insect has also been taken at light.

The species may be distinguished from the common *Trigonotylus ruficornis* (Geoffroy) by the red markings of the first antennal segment. These comprise three, sharply demarcated, longitudinal stripes in *T. caelestialium*. In *T. ruficornis* the red is more general, and if there are any stripes these are not sharply demarcated. There has clearly been confusion between these two species in the past, and prior records for *T. ruficornis* require confirmation by tracing to a specimen.

Annotated bibliography

290B Tuponia mixticolor (A. Costa) (Miridae), formerly Tuponia carayoni Wagner

Nau (1980). First found in Britain by B. S. Nau on 17 August 1979 on tamarisk at the beach car park, Freshwater, Isle of Wight. Second record on 5 September 1979, on tamarisk at Hill Head, Lee-on-Solent, South Hampshire at the base of a sea cliff. Species searched for in 1979 at sites in Essex, Sussex and Dorset, and elsewhere in Hampshire and Isle of Wight, without result.

Appleton (1984). On tamarisk, Hayling Island, South Hampshire, 16 July 1983.

Hodge (1986). On tamarisk, East Head Dunes, West Sussex, 11 June 1985.

Knill-Jones (1991). Found again at the Freshwater site on 20 August 1990.

Dickson (2002). Beaten from tamarisk, Hook Lake NR, South Hampshire, 26 August 2001.

Denton (2004). On tamarisk, Church Norton, West Sussex, August 2003.

Gibbs (2005). Swept from tamarisk on dunes, Minsmere RSPB Reserve, Suffolk, 13 July 2004.

Barclay & Nau (2003). Many records, mostly on tamarisk but also at light, mostly at the coast but also inland, in the counties of Dorset, Devon, Middlesex, Hampshire, Kent and Suffolk, in the months of June, July, August and September.

Ryan (2012b). Beaten from tamarisk growing out of a low cliff at Lepe, South Hampshire, 12 July 2010, and at the beach car park, West Wittering, West Sussex, 11 August 2010.

Bowdrey (2013). On tamarisk growing from the cliffs of the North Essex coast, between Clacton-on-Sea and Holland-on-Sea (10 October 2012) and between Harwich and Dovercourt (24 October 2012).

Ryan (2016b). Records for South Hampshire and Isle of Wight.

198B. Anthocoris amplicollis Horváth (Anthocoridae)

Crossley (1982). First record by R. Crossley on 25 August 1979, taken from ash at Lowna, near Kirbymoorside, North Yorkshire. Further specimens taken on ash at nearby locations on 15 June, 9 August and 23 August 1980. Specimen found in a collection taken on ash in the same area on 9 July 1978. Keys out to *A. confusus* in Southwood & Lestion (1959), but is larger and darker. It can be distinguished from all other British *Anthocoris* by the shape of the pronotum, being less constricted towards the front, with the anterior angles rounded and explanate.

Jessop (1983). Key to British Anthocoris, including A. amplicollis.

Hawkins (2003). Record for 21 September 1995 at Riddlesdown, Surrey on oak.

Campbell (2010). Records for 7 September 2009, Wychwood Forest, Oxfordshire and Twywell, near Kettering, Northamptonshire in 2007.

198C Anthocoris minki Dohrn (Anthocoridae)

Jessop (1983). This species is confused with *Anthocoris simulans* Reuter in Southwood & Leston (1959), and the description given under the former name actually applies to the latter species. *A. minki* was first discovered in Britain from leaf petiole galls collected in August 1980 by V. F. Eastrop from Lombardy Poplar growing along the towpath at Kew, London (Surrey). The bug lives within the galls, feeding upon the aphids that form them. Both adults and nymphs were taken.

Jones (2000). Three records from Catford, London (Kent), Three Locks, Soulbury, Buckinghamshire and Morden Cemetery, Surrey (sweeping near Lombardy Poplar, 5 July 1998).

Jones (2001). Record for 30 September 1999, Foster Memorial Park, Catford, London (VC16, West Kent) in *Pemphigus* galls on Lombardy Poplar.

Jones (2004). From galls of Lombardy Poplar, Wansworth Common, Surrey, 22 September 2003.

Nau (2007). Three records from Stewartby, Bedfordshire on Lombardy Poplar (19 September 2006, adults and nymph), Three Locks, Buckinghamshire (15 September 2006), and Cockayne Hatley Wood, Cambridgeshire (5 August 2006). [The last record was overlooked by Ryan (2014a & 2014b).]

Ryan (2016d). Records for Oxfordshire and Berkshire, September 2014, adults and nymphs found in the galls of Lombardy Poplar. One found on the collector's jacket.

075B Nysius graminicola (Kolenati) (Lygaeidae)

Allen (1984). New to Britain, under a heather clump, Studland, Dorset, 5 May 1977.

Dolling (2003). Key to Nysius.

Nau (2004). First British record, 1977, Dorset (A. A. Allen). Second record, 2001, Hampshire (R. Dickson). In numbers at sites in Hertfordshire, 2003, (J. Widgery).

Dickson (2004). Swept from sparse vegetation over shingle at sunset, Hamble Estuary, 6 August 2003. [Presumably a repeat of the record by Dickson (2007), below, but with a different date.]

Widgery (2004). 15 September 2003, waste ground containing a preponderance of mayweed, Tyttenhanger Gravel Pits, Hertfortdshire.

Dickson (2005). Swept, Botley Wood, South Hampshire, 21 & 25 August & 1 September 2004.

Dickson (2007). Records from South Hampshire in 2006: swept from sparse vegetation on shingle, Hamble Estuary, 6 September; swept from emergent vegetation on clay over chalk, Wallington, 27 August; swept from vegetation over shingle, Browndown, 16 August; swept from bank of car park, Lee-on-Solent, 16 August; in a sleeve of Lappet larvae, Fareham, 14 October.

Ryan (2013a). Sweeping disturbed arable land, near Goring, Oxfordshire, July/August 2006.

Ryan (2014b). Beaten from Sea Mayweed growing from a sea wall, Thorney Island, West Sussex, 1 August 2010. Sweeping the dunes at East Head, near West Wittering, West Sussex, 11 August 2010. Three sites in Oxfordshire in 2006.

Ryan (2016b). Record for South Hampshire.

442B Saldula connemarae Walton (Saldidae)

Walton (1986). Reported as new to science by G. A. Walton in 1986 from specimens found among the rocks and boulders by the edge of the low-lying lakes of Connemara, West Galway. Occur as dark and pale forms. The latter closely resemble *Saldula saltatoria* (Linnaeus), but are slightly

stouter, with posterior tibiae longer than the antennae, whereas they are shorter in *S. saltatoria*. There are also differences in the male genitalia.

Ryan (2016a). Record for West Galway.

076A Orsillus depressus (Mulsant & Rey) (Lygaeidae)

Hawkins (1989). Found adults and nymphs in Woking, Surrey on a Lawson's Cypress growing in a garden on 27 September 1987. A return visit on 3 April 1988 produced another adult, suggesting that the animal overwinters in this state.

Allen (1992). On Lawson's Cypress in author's garden, Charlton, West Kent, 18 May 1992.

Kirby (1993). Records for Bedfordshire and Northamptonshire.

Kirby (1994). Gidea Park, South Essex, 27 September 1992.

Jones (1997). Peckham and Dulwich Park, Surrey, 17 October 1996, on Lawson's Cypress.

Dickson (2002). Park Gate, South Hampshire, 19 April 2001, off Cupressus.

Helden & Leather (2005). Bracknell, Berkshire.

Alexander (2005b). Gloucestershire: Fretherne, 20 September 2003; Alderton, 19 September 2003 & 5 September 2004; Naunton, 29 June 2004; and Icomb, 6 September 2004.

Whitehead (2006). Adults and nymphs, 4 September 2004, Lawson's Cypress, Pershore, Worcestershire.

Philp (2006). Sweeping mixed vegetation in the author's garden, Aylesford, East Kent, 6 June 1995.

Salmon (2009). On Lawson's Cypress, Brownsea Island, Poole Harbour, Dorset.

Bantock (2010). Sweeping Lawson's Cypress, Quaker Meeting House, Brentford, Middlesex, early September 2010. [Overlooked by Ryan (2014a & 2014b).]

Brooke (2010). Pencraig, near Ross-on-Wye, Herefordshire, 15 September 2010, adults and a nymph on a Lawson's Cypress in a garden.

Ryan (2013c). On Lawson's Cypress in Oxford, 2006: University Parks (3 August), Headington Hill Park (22 August), Cutteslowe Park and Wellington Square. Also adults and nymphs, Wellington Square, 15 October 2011.

Ryan (2015c). Records for East and West Gloucestershire.

Ryan (2016b). Record for South Hampshire.

488A *Corixa iberica* Jansson (Corixidae)

Savage (1989). Separation of *Corixa iberica* from *Corixa punctata* by examination of the right paramere. The former species has a single distinct dorsal process, but the latter has two. Records for *C. iberica* from North-western Ireland, Western Scotland, Orkney and Shetland. *C. iberica* first described by A. Jansson in 1981.

Savage (1991). Specimens of *C. iberica* have been found in museum collections standing as *C. punctata*, some dating from the nineteenth century. Individuals of both *C. iberica* and *C. punctata* frequently occur which possess features tending towards an intermediate condition.

Angus (2006c). Evidence of hybridisation between C. iberica and C. punctata.

Angus (2006b). Ditto.

Ryan (2016a). Record for Antrim.

093B Megalonotus emarginatus (Rey) (Lygaeidae)

Aukema & Nau (1992). B. Aukema found 19 specimens in the British Museum (Natural History) standing under the genus *Megalonotus* Fieber, six of which dated from the 19th Century. Records for Berkshire, Dorset, Essex and Kent in the months of March, May, June, August and September. The species is distinguished from *Megalonotus chiragra* (Fabricius) and *Megalonotus sabulicola* (Thomson) by the shape of the pronotum. In *M. emarginatus*, the hind corners protrude posteriorly, so that the hind margin is not a regular curve, as it is in the other two species.

Allen (1993). Species is darker, larger and more elongate than *M. chiragra*. 27 July 1964, Grayford Maules, West Kent (on a bank). 21 May 1991, Graveney Marshes, East Kent (at the base of a breakwater).

Nau (1997). 24 August 1996, Maulden Wood (in litter on sandy soil) and Sandy Heath Quarry, Bedfordshire.

Judd (1998). Sieved from litter at side of cliff path, Porthcothan, West Cornwall, 6 August 1986.
Museum specimen from Gerrans Bay, East Cornwall, August 1900. Adults and nymphs taken in Walderslade, West Kent (partly vegetated embankment), 2 August 1987 and Aylesford, West Kent, 7 September 1990. Single specimen taken in Northbourne Court, East Kent, 26 June 1991.

Whitehead (2004). 24 June 2002, disused railway sidings, Honeybourne, Worcestershire.

Alexander (2005a). Arable field, West Pentine headland, near Newquay, West Cornwall, 11 July 2003.

Nau (2005). In a sandy field, Sandy, Bedfordshire, 27 May 2004.

Campbell (2008). Frilford, Watsonian Berkshire, 1997. Caversham, Oxfordshire, 1990.

Dolling (2014). Record for South Yorkshire.

Ryan (2015a). Records for East and West Cornwall.

Ryan (2015b). Record for Warwickshire.

418A Trigonotylus caelestialium (Kirkaldy) (Miridae)

Aukema & Nau (1992). B. Aukema found three specimens in the British Museum (Natural History) standing under the genus *Trigonotylus* Fieber, dated 23 June 1953, 30 June 1922 and August 1900, from the counties of Middlesex and Surrey. The species may be distinguished from the common *Trigonotylus ruficornis* (Geoffroy) by the red markings of the first antennal segment. These comprise three, sharply demarcated, longitudinal stripes in *T. caelestialium*. In *T. ruficornis* the red is more general, and any stripes are not sharply demarcated.

Allen (1993). Specimens from a collection, sweeping grass and at light, Blackheath and Charlton, West Kent (undated) and sweeping chalk hills, Chanctonbury Ring, West Sussex, 27 June 1960.

Campbell (2008). Frilford, Watsonian Berkshire, 1997. Burford, Oxfordshire, 1992.

Crossley (1993). Specimen from a collection, Brough, East Yorkshire, 26 June 1971.

Alexander (2005b). Swept from rank salt marsh grasses along the western banks of the River Severn at Whites Court, Awre, West Gloucestershire, 11 August 2004.

Alexander (2006). Ditto.

Ely (2006). First recorded in South-west Yorkshire at Silverwood, Rotherham, 6 August 2003. Found at five further sites since.

Ryan (2015a). Record for West Cornwall.

Ryan (2015b). Record for Warwickshire.

Ryan (2015c). Record for West Gloucestershire.

Ryan (2015d). 17 July 2014, airfield runway, Worminghall, Buckinghamshire. Also records for Surrey, Berkshire and Oxfordshire in the months of June, July, August and September. Habitats included wet meadow, woodland clearing, heathland, and derelict ground, all specimens taken sweeping.

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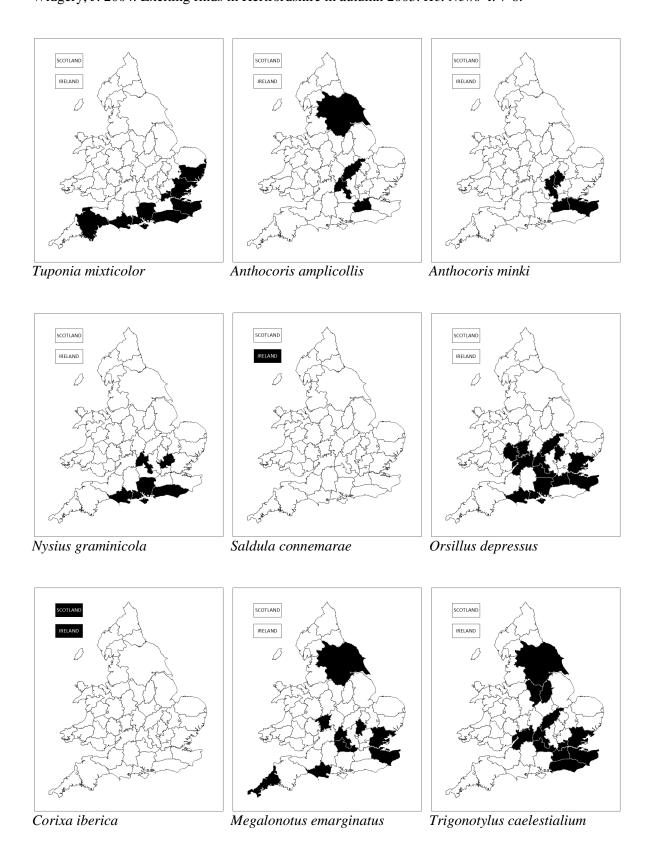


FIGURE 1. The county distributions of the described species (Ryan, 2014 a & 2014b).

THE HUNT FOR AGNOCORIS RECLAIREI (WAGNER) (HEMIPTERA: MIRIDAE) IN BUCKINGHAMSHIRE

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I have previously reported finding this insect new to Oxfordshire and Berkshire (Ryan, 2012 & 2014c), and its patchy distribution (Figure 1) suggests that its discovery in other counties awaits any Hemipterist determined to track it down. My collecting in Oxfordshire indicated that White Willow, *Salix alba* L. (Saliceceae), was a good target for records, particularly those plants that were in flower or seed, from where nymphs could be taken in early summer.

Buckinghamshire was an obvious county to add to the bug's known distribution, the boundary with Oxfordshire being about ten kilometres from my home in Oxford, and I felt that the species would soon turn up during my general collecting, without my having to make a special effort to find it. However, White Willow had seldom been encountered during my visits to the county on other business, so during 2015 I made a determined search for it. Success, or so I thought, was achieved on 17 August when I visited Wilstone Reservoir, east of Aylesbury. Here, growing from the south-west shore (National Grid Reference SP901129) there were several examples of White Willow and Osier, *Salix viminalis* L., which due to the low water level, could be reached by venturing onto the exposed gravel bed of the reservoir. *A. reclairei* was quickly found, together with *Campylomma annulicorne* (Signoret) (Miridae), *Anthocoris limbatus* Fieber (Anthocoridae) and *Orius* Wolff (Anthocoridae). Specimens of the last were dissected at home to reveal *Orius laticollis* (Reuter) (Figure 2).

Alas, when I checked the grid reference of my finds against the digital vice-county mapping on the internet (http://herbariaunited.org/gridrefVC), I found that I had strayed a few metres out of Buckinghamshire (VC24) into Hertfordshire (VC20). Hertfordshire has a salient of land which extends several kilometres into Buckinghamshire, and Wilstone Reservoir was within this, the vice-county boundary running along the south-west shore. Given that I was collecting from the dried-up bed of the reservoir, I was clearly in Hertfordshire, not Buckinghamshire. (Curses!)

All was not lost, however, as I quickly realised that *A. reclairei* had not been reported from Hertfordshire either, so I still had a new county record. Nevertheless, it was still annoying that I had not found *A. reclairei* in Buckinghamshire, and felt obliged to continue the search. I eventually took the animal from a White Willow overhanging a bridge on the River Thame (SP728112), between Chearsley and Cuddington, on 13 September.

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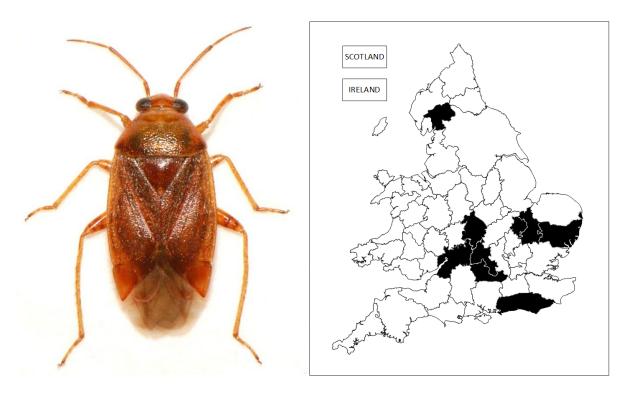


FIGURE 1. Agnocoris reclairei and its county distribution (Ryan, 2014a & 2014b).



FIGURE 2. Anthocoris limbatus, Orius laticollis and male Campylomma annulicorne (left to right), specimens taken from Wilstone Reservoir.

SOME HOST PLANT ASSOCIATIONS OF HEMIPTERA-HETEROPTERA IN 2015

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This article follows Ryan (2015) and presents a further list of confirmed host plants for species of Hemiptera-Heteroptera. Nymphs were taken from the listed host plants in the field and reared to adult at home to confirm their identity.

ACANTHOSOMATIDAE

Acanthosoma haemorrhoidale (Linnaeus), Hawthorn Shieldbug

Rowan, *Sorbus aucuparia* L. (Rosaceae), Bicester Town Cemetery, Oxfordshire (SP582220), 9 August 2015.

Tamarisk, *Tamarix* spp. (Tamaricaceae), Dunstan Road, Oxford, Oxfordshire (SP541077), 15 August 2015.

Hawthorn, *Crataegus* spp. (Rosaceae), Sandhouse Lane NR, near Leighton Buzzard, Bedfordshire (SP936298), 26 August 2015.

Cyphostethus tristriatus (Fabricius), Juniper Shieldbug

Lawson's Cypress, *Chamaecyparis lawsoniana* (A. Murray bis) Parl. (Cupressaceae), Chipping Norton Cemetery, Oxfordshire (SP305271), 11 August 2015.

Elasmostethus interstinctus (Linnaeus), Birch Shieldbug

Birch, *Betula* spp. (Betulaceae), Vale Park, Aylesbury, Buckinghamshire (SP823138), 2 August 2015.

PENTATOMIDAE

Pentatoma rufipes (Linnaeus), Forest Bug

Aspen, *Populus tremula* L. (Salicaceae), New Marston Meadows, Oxford, Oxfordshire (SP519076), 2 July 2015.

Hawthorn, *Crataegus* spp. (Rosaceae), hillside meadow, Stonesfield, Oxfordshire (SP390163), 8 July 2015.

Sycamore, *Acer pseudoplatanus* L. (Sapindaceae), Yarnton, Oxfordshire (SP473117), 10 July 2015.

Palomena prasina (Linnaeus)

Lawson's Cypress, *Chamaecyparis lawsoniana* (A. Murray bis) Parl. (Cupressaceae), Royal Leamington Spa Cemetery, Warwickshire (SP321642), 18 August 2015.

Picromerus bidens (Linnaeus)

Birch, *Betula* spp. (Betulaceae), The Chase, Broad Layings, Hampshire (SU443628), 17 July 2015.

Heather, *Calluna vulgaris* (L.) Hull (Ericaceae), Burnt Platt Wood, Stoke Row, Oxfordshire (SU690831), 20 July 2015.

COREIDAE

Gonocerus acuteangulatus (Goeze), Box Bug

Box, *Buxus sempervirens* L. (Buxaceae), Church Enstone Graveyard, Oxfordshire (SP380250), 11 August 2015.

LYGAEIDAE

Chilacis typhae (Perris)

Heads of bulrush, *Typha* spp. (Typhaceae), Cotswold Water Park, Fairford, Gloucestershire (SP168004), 7 June 2015.

Gastrodes grossipes (De Geer)

Larch, Larix spp. (Pinaceae), University Parks, Oxford, Oxfordshire (SP513072), 12 July 2015.

LYGAEIDAE (CONTINUED)

Kleidocerys resedae (Panzer)

Western Red Cedar, *Thuja plicata* Donn ex D. Don (Cupressaceae), Tring Cemetery, Hertfordshire (SP912110), 17 August 2015.

Birch, *Betula* spp. (Betulaceae), Leighton Buzzard Cemetery, Bedfordshire (SP929257), 26 August 2015.

Orsillus depressus (Mulsant & Rey)

Lawson's Cypress, *Chamaecyparis lawsoniana* (A. Murray bis) Parl. (Cupressaceae), University Parks, Oxford, Oxfordshire (SP514073), 27 July 2015; Hinksey Park, Oxford, Oxfordshire (SP513048), 31 July 2015; Aylesbury Cemetery, Buckinghamshire (SP830134), 17 August 2015.

Scolopostethus decoratus (Hahn)

Heather, *Calluna vulgaris* (L.) Hull (Ericaceae), Burnt Platt Wood, Stoke Row, Oxfordshire (SU690831), 20 July 2015.

MIRIDAE

Alloeotomus gothicus (Fallén)

Scots Pine, *Pinus sylvaticus* L. (Pinaceae), University Parks, Oxford, Oxfordshire (SP516072), 29 July 2015.

Atractotomus mali (Meyer-Dür)

Hawthorn, *Crataegus* spp. (Rosaceae), lake at Baulking, Watsonian Berkshire (SU324908), 19 June 2015.

Cyllecoris histrionius (Linnaeus), The Impressionist

Sycamore, *Acer pseudoplatanus* L. (Sapindaceae), Kingston Blount, Oxfordshire (SU741986), 30 May 2015.

Deraeocoris flavilinea (A. Costa)

Sycamore, *Acer pseudoplatanus* L. (Sapindaceae), Kingston Blount, Oxfordshire (SU741986), 30 May 2015.

Hazel, *Corylus avellana* L. (Betulaceae), New Marston Meadows, Oxford, Oxfordshire (SP518079), 16 June 2015.

Hawthorn, *Crataegus* spp. (Rosaceae), lake at Baulking, Watsonian Berkshire (SU324908), 19 June 2015.

Deraeocoris lutescens (Schilling)

Turkey Oak, *Quercus cerris* L. (Fagaceae), University Parks, Oxford, Oxfordshire (SP513072), 12 July 2015.

Dicyphus errans (Wolff)

Hedge Woundwort, *Stachys sylvatica* L. (Lamiaceae), College & Queen Wood, Christmas Common, Oxfordshire (SU714921), 14 June 2015.

Dryophilocoris flavoquadrimaculatus (De Geer), The Oak Lantern

Oak, *Quercus* spp. (Fagaceae), University Parks, Oxford, Oxfordshire (SP517071), 3 May 2015.

Grypocoris stysi (Wagner), The Nettle Lantern

Common Nettle, *Urtica dioica* L. (Urticaceae), Ardley Quarry, Oxfordshire (SP536273), 5 June 2015.

Leptopterna dolabrata (Linnaeus)

Cock's-foot, *Dactylis glomerata* L. (Poaceae), New Marston Meadows, Oxford, Oxfordshire (SP519076), 25 May 2015.

Macrolophus pygmaeus (Rambur)

Hedge Woundwort, *Stachys sylvatica* L. (Lamiaceae), College & Queen Wood, Christmas Common, Oxfordshire (SU714921), 14 June 2015.

Megalocoleus tanaceti (Fallén)

Tansy, *Tanacetum vulgare* L. (Asteraceae), track and wasteground, Wolvercote, Oxford, Oxfordshire (SP491103), 3 July 2015.

MIRIDAE (CONTINUED)

Neolygus contaminatus (Fallén)

Birch, *Betula* spp. (Betulaceae), The Chase, Broad Layings, Hampshire (SU443628), 15 June 2015.

Orthotylus ericetorum (Fallén)

Heather, *Calluna vulgaris* (L.) Hull (Ericaceae), Burnt Platt Wood, Stoke Row, Oxfordshire (SU690831), 20 July 2015.

Phytocoris longipennis Flor

Oak, *Quercus* spp. (Fagaceae), The Chase, Broad Layings, Hampshire (SU443628), 17 July 2015.

Wych Elm, *Ulmus glabra* Huds. (Ulmaceae), River Evenlode, near Stonesfield, Oxfordshire (SP391154), 21 July 2015.

Phytocoris tiliae (Fabricius)

Leyland Cypress, *x Cupressocyparis leylandii* (Jacks. Dallim.) Dallim. (Cupressaceae), University Parks, Oxford, Oxfordshire (SP513072), 25 July 2015.

Pilophorus cinnamopterus (Kirschbaum)

Corsican Pine, *Pinus nigra* J.F. Arnold (Pinaceae), University Parks, Oxford, Oxfordshire (SP514071), 27 July 2015.

Pinalitus cervinus (Herrich-Schaeffer)

Sycamore, *Acer pseudoplatanus* L. (Sapindaceae), Beaumont Buildings, Oxford, Oxfordshire (SP510067), 2 May 2015.

Hawthorn, *Crataegus* spp. (Rosaceae), New Marston Meadows, Oxford, Oxfordshire (SP518079), 21 May 2015.

Pinalitus viscicola (Puton)

Mistletoe, *Viscum album* L. (Santalaceae) on cherry, *Prunus* sp. (Rosaceae), Holywell Cemetery, Oxford, Oxfordshire (SP520066), 15 August 2015.

Plagiognathus arbustorum (Fabricius)

Black horehound, *Ballota nigra* L. (Lamiaceae), track and wasteground, Wolvercote, Oxford, Oxfordshire (SP494099), 3 July 2015.

Platycranus bicolor (Douglas & Scott)

Broom, *Cytisus* spp. (Fabaceae), Wildmoor Heath, Crowthorne, Berkshire (SU841629), 23 July 2015.

Psallus ambiguus (Fallén)

Goat Willow, *Salix caprea* L. (Salicaceae), New Marston Meadows, Oxford, Oxfordshire (SP518079), 21 May 2015.

Rhabdomiris striatellus (Fabricius)

Oak, *Quercus* spp. (Fagaceae), University Parks, Oxford, Oxfordshire (SP517071), 3 May 2015.

Salicarus roseri (Herrich-Schaeffer)

White willow, *Salix alba* L. (Salicaceae), lake at Stanton Harcourt, Oxfordshire (SP411049), 29 June 2015.

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ADDITIONS TO RYAN'S COUNTY LIST OF HEMIPTERA-HETEROPTERA FOR SHROPSHIRE

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The county list for Shropshire in Ryan (2014) was compiled from that of Massee (1955) with additional records from the national entomological literature published in the six decades between these two papers. Ryan did not consider local publications, in particular Boardman (2014), and the present paper addresses this shortcoming, adding Boardman's new county records. These comprise 20 species of Pentatomoidea and Coreoidea, which are listed below.

ACANTHOSOMATIDAE

Cyphostethus tristriatus (Fabricius) Elasmucha grisea (Linnaeus)

CYDNIDAE

Adomerus biguttatus (Linnaeus) Sehirus luctuosus Mulsant & Rey Tritomegas bicolor (Linnaeus)

PENTATOMIDAE

Aelia acuminata (Linnaeus)
Eurydema oleracea (Linnaeus)
Eysarcoris venustissimus (Schrank)
Neottiglossa pusilla (Gmelin)
Pentatoma rufipes (Linnaeus)
Picromerus bidens (Linnaeus)
Piezodorus lituratus (Fabricius)
Zicrona caerulea (Linnaeus)

COREIDAE

Coreus marginatus (Linnaeus) Coriomeris denticulatus (Scopoli) Leptoglossus occidentalis Heidemann

RHOPALIDAE

Myrmus miriformis (Fallén) Rhopalus subrufus (Gmelin) Stictopleurus abutilon (Rossi)

STENOCEPHALIDAE

Dicranocephalus medius (Mulsant & Rey)

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THREE FURTHER ADDITIONS FOR VC20 TO THE ATLAS OF THE HEMIPTERA-HETEROPTERA OF THE BRITISH ISLES

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Aneurus avenius, Capsodes flavomarginatus, and Psallus betuleti

The purpose of this brief report is to note three new species additions for VC20 required in the *Atlas of the Hemiptera-Heteroptera of the British Isles* (Ryan, 2014a; 2014b). The three additions have arisen through cross-checking the historical and new records that I have compiled for Hertfordshire (since taking on the role of county recorder in 2014) against the atlas – a process that was facilitated by Rob Ryan.

The first species to add is the Aradid bug *Aneurus avenius* (Dufour). An adult female was found by William Bishop in a dead hornbeam branch in Bencroft Wood (in the Broxbourne Woods complex) on a Herts Invertebrate Project meeting in October 2015, and it was also found by Tristan Bantock in Broxbourne Woods earlier that year. I have spent further time in this complex of woods in 2016 and, of note, I sampled two dead hornbeam branches (in total) in Hoddesdon Park Wood in May 2016 and found an adult male *Aneurus avenius* in each. An adult male also came out in an emergence bag in May 2016 from a dead hornbeam log taken from Balls Wood, just north of Broxbourne Woods, as part of an ongoing experiment.

The other two species to add are both Mirids. There is a single record, from 1995, of *Capsodes flavomarginatus* (Donovan) from a light trap run by John Murray in Marshalls Heath Local Nature Reserve (determined by my predecessor John Widgery). And *Psallus betuleti* (Fallén) can now be returned to the county list – after the removal necessitated by Nau's (2007) report of the ambiguity of the species name – as I swept a specimen off birch in July 2015 at Waterford Heath Nature Reserve (which I determined under microscope using Nau's draft Mirid key from 2012).

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